TEXT BOOK
MEDICAL & SURGICAL
ON
HOMŒOPATHIC PRINCIPLES.


22101640612

TEXT BOOK

OF

MODERN MEDICINE AND SURGERY.

Digitized by the Internet Archive
in 2014

https://archive.org/details/b20411650

TEXT BOOK

OF

MODERN MEDICINE

AND

SURGERY

ON

HOMŒOPATHIC PRINCIPLES.

BY

E. HARRIS RUDDOCK, M.D.,

CENTIATE OF THE ROYAL COLLEGE OF PHYSICIANS; MEMBER OF THE ROYAL COLLEGE OF SURGEONS; LICENTIATE IN MIDWIFERY, LONDON AND EDINBURGH, ETC.; LATE PHYSICIAN TO THE READING AND BERKSHIRE HOMŒOPATHIC DISPENSARY.

NEW EDITION.

LONDON:
THE HOMŒOPATHIC PUBLISHING COMPANY,
12, WARWICK LANE, PATERNOSTER ROW, E.C.

NEW YORK AND PHILADELPHIA:
BOERICKE AND TAFEL.

And all Homœopathic Chemists and Booksellers.

1893.

17834

35333315

95400

M17594

WELLCOME INSTITUTE LIBRARY
Coll. wellMOmec
Call No. WB930 1893 R91t

ADVERTISEMENT.

In issuing a new Edition of Dr. Ruddock's standard work, the publishers have taken the opportunity of introducing some additions, including the incorporation of a few of the newer remedies. The Clinical Directory has been somewhat extended, later returns concerning the extent and prevalence of certain forms of disease have been consulted, and other minor changes made with a view of bringing the work more nearly up to date. Otherwise the Text Book remains substantially the same as when it last underwent the revision of its Author. Nothing has been omitted, and the additions, though numerous, are individually trifling in extent.

12, Warwick Lane, Paternoster Row,
London, E.C.

PREFACE.

The treatment of disease according to the law of similars is becoming more and more general among medical practitioners, even though the recognition of "Homœopathy" be repudiated. The logic of facts which substantiates that law is becoming too strong to remain unexamined. Hence many of the younger practitioners and students in medical schools, who have not become wedded to old methods by long familiarity, wish to investigate what some of their seniors desire to be regarded as unorthodox. And we believe that many are open to conviction if it can be shown that the same end —the cure and alleviation of disease—can be reached more pleasantly, more rapidly, and more certainly, by a course which is not greatly divergent from the old route. In truth, the lines are the same, but the method of traversing them is different. Those who are used to the arrangement of maladies in the "Nomenclature of Diseases" issued by the Royal College of Physicians, will find that it has been followed in this work. Those who are accustomed to other "Text Books" will observe that there are numerous points of contact between them and this, so that it will not be difficult to pass from one to the other, when studying the pathology of any particular disease with a view to discover the best methods of cure. There is

less antagonism between the old system and the new than many persons suppose,—the new really only proposes to show "a more excellent way." What that is, the Author has endeavoured to point out in this Text Book, in such a manner as to commend it to the class referred to; in short, to all intelligent and impartial investigators. He has been so much encouraged by the reception that has been accorded to his "Vade Mecum," and by the usefulness which has attended its publication, as verified not only by private persons, but also very largely by members of the Medical Profession in all parts of the world, that he has not deemed it necessary or advisable to depart from the general plan of that work. This is, however, very far from being a reprint in an enlarged form. Many new Sections have been added, especially with reference to diseases prevalent in India and the Colonies. Hygiene and accessory treatment have been the subjects of careful and ample consideration, in the new light which has been thrown on the operation of sanitary laws. The medical treatment has been carefully revised, and where new remedies have been found to exercise special influence on specific pathological conditions or disordered functions, they have been studiously noted. The Materia Medica comprises new features which will commend it to those who prepare as well as administer the medicines; while the additions made include some of those most thoroughly proved by the American investigators and practitioners. A few sections on the more common and simple surgical operations are added to guide and aid those who are far-distant from effective assistance, and for cases of urgency. But those who wish for more complete surgical information must refer to the best manuals on the subject. In the preparation of

the Text Book, the Author has consulted the most recent and the most authoritative medical and surgical works, and has embodied much information he has derived from them, so that his work may include what is most modern in opinion and practice. His grateful acknowledgments to their authors he begs to make in this general form. Names are appended to numerous quotations throughout the work, but he is indebted to others for valuable general suggestions and statements in places where names do not appear. Special acknowledgment is made at the commencement of the Clinical Directory, in the preparation of which the Author has received hints and notes from some thirty Physicians actively engaged in different parts of this country and America, whose lengthened practical experience is thus courteously placed at the service of other members of the profession. If this Text Book carry forward the work which the Author has undertaken, is the means of convincing or converting intelligent persons to belief in the law of similars, and is instrumental in lessening any of the "ills that flesh is heir to," he will feel justified in redeeming time from the active duties of a laborious profession to prepare the work which he now offers to the studious investigation of his readers.

E. HARRIS RUDDOCK.

HINTS TO THE READER.

I.—When the work is consulted, the *whole* Section devoted to the disease in question should be studied—the symptoms, causes, medicines, and accessory means—before deciding on the treatment. One portion of a Section throws light upon another, and hesitation in the choice of a remedy may often be removed by considering the Section in its entirety.

II.—Facility of reference may be secured by an acquaintance with the arrangement of the Text Book; the headings on the top of the left-hand pages mark both the general subject or class of diseases under consideration, and briefly the particular topic or disease to which it is devoted; the right-hand page-heading more distinctly indicates the disease under consideration.

At the commencement of each Section in Part III., the principal designations by which a disease is known are given; the first, in thick type, being the one invariably adopted in the *New Nomenclature*, and that by which it is desirable that the disease be in future uniformly styled; the second, in italics and within parentheses, is the Latin name; when other names follow, they are synonyms or common appellations. By noting the class of disease indicated on the left-hand page-heading, the reader may form an idea of the nature of any particular

disease; thus Diphtheria, Influenza, Whooping-cough, etc., occur amongst the *Blood* diseases—those in which the blood itself is affected; Rheumatism, Anæmia, Phthisis, etc., are classed with the *Constitutional* diseases—those in which the whole system is involved. The recognition of these points will often be highly suggestive, and influence the prognosis and treatment of the case. Medical terms are frequently used, but they are briefly explained in the index at the end of the volume; this index is made very copious, and every point of importance may be found by it. Consultation is further made easy by a full table of contents at the commencement.

III.—Occasionally, remedies are prescribed without describing in detail the symptoms by which their use is indicated. Under such circumstances, and whenever hesitating in the choice of a remedy, the reader is referred to the Materia Medica; a comparison should be made between the symptoms of the case under consideration, and the essential features peculiar to each remedy. The Materia Medica forms a most important part of the volume, and an attentive study of it will give a broad and tolerably exact knowledge of many valuable remedial agents, and a measure of skill in using them.

IV.—Persons desirous of being able to act wisely and promptly in the *general* treatment of disease should *read this work through, from the first page to the last.* The first Part is devoted to *Hygiene;* the second to *Accessory Measures;* the third to *Diseases* and their Treatment; the fourth to *Materia Medica;* and the fifth to *Poisons.* The sixth part—the *Clinical Directory*—is chiefly valuable for its concise, suggestive hints, and for references to the Materia Medica. Many important

practical points are scattered through the various Sections, but which, to economise space, are not repeated, and so may be lost to those who only read detached portions. Even after having read the Text Book through, an occasional half-hour spent in perusing it will facilitate its consultation in cases of urgency.

V.—Lastly, the Author will be glad to receive notes of the experience of persons using the work. Striking cases of cure, which clearly illustrate the action of single remedies, are instructive to all. Friendly criticisms will also always be acceptable. Thus, by enlarged observation on his part, and the co-operation of numerous *confrères*, the Author hopes to make succeeding editions increasingly helpful in the prevention and cure of disease.

CONTENTS.

PART I.

Introductory.

CHAPTER I.

Hygienic Observations.

PAGE

§1. Hygiene 27
2. General Plan of Dietary 28
3. Comparative Estimate of Brown and White Bread 34
4. Remarks on various Articles of Food 37
5. On Cooking Animal Food 46
6. Non-Intoxicating Beverages 49
7. Water 55
8. Air 57
9. Sunlight 63
10. Healthy Dwellings 65
11. Exercise 66
12. Clothing 70
13. Bathing 73
14. The Influence of Professions and Occupations on Health . . . 77
15. Sanitary Hints for Europeans in India, Africa, South America, and other Tropical Climates 79

CHAPTER II.

Signs and Symptoms of Disease.

§16. Temperature and the Clinical Thermometer 82
17. Rigors 87
18. The Pulse 89
19. Breathing 91
20. The Tongue 91
21. Pain 92
22. The Skin 93
23. The Urine 94

CHAPTER III.

The Medicines, etc.

PAGE
§24. Forms, Names, and Attenuations 97
25. Doses and their Repetition 101

PART II.

Accessories in the Treatment of Disease.

§26. Food for Invalids, etc. 105
27. Sick-room Dietaries in Public Institutions 112
28. Demulcent Beverages, etc. 115
29. Cod-Liver Oil 117
30. Glycerine 120
31. Ice 121
32. Warm and other Baths 122
33. Wet Compresses 127
34. Poultices 130
35. Fomentations 132
36. Enemata (*Injections*) 133
37. Inhalation 135
38. Some Directions on Nursing 136

PART III.

Medical and Surgical Diseases, and their Homœopathic and General Treatment.

CHAPTER I.

General Diseases:—*A.* Blood Diseases.

§39. Small-pox 145
40. Cow-pox and Vaccination 153
41. Chicken-pox 156
42. Measles 157

General Diseases (*continued*).

PAGE
43. Scarlet Fever—Scarlatina 164
44. Typhus Fever 174
45. Plague 184
46. Enteric Fever—Typhoid Fever—Gastric Fever 185
47. Relapsing Fever—Famine Fever 199
48. Yellow-Fever 202
49. Remittent Fever 207
50. Intermittent Fever—Ague 209
51. Simple Continued Fever 216
52. Dengue 218
53. Simple Cholera—English Cholera—Sporadic Cholera 219
54. Asiatic Cholera—Malignant Cholera 220
55. Diphtheria 227
56. Whooping-Cough 234
57. Mumps 239
58. Influenza 241
59. Erysipelas—St. Anthony's Fire 244
60. Puerperal Fever 248
61. Puerperal Ephemera 249

CHAPTER II.

General Diseases :—*B.* Constitutional Diseases.

§62. Acute Rheumatism—Rheumatic Fever 250
63. Muscular Rheumatism 256
64. Chronic Rheumatism 259
65. Acute Gout 262
66. Chronic Gout 270
67. Cancer—Malignant Disease 272
68. Syphilis—Venereal Disease 281
69. Lupus 288
70. Leprosy 289
71. Elephantiasis—Barbadoes Leg 293
72. Scrofula 294
73. Tubercular Meningitis—Acute Hydrocephalus 303
74. Scrofulous Ophthalmia 304
75. Scrofulous Disease of Glands 306
76. Phthisis Pulmonalis—Pulmonary Consumption 306
77. Tabes Mesenterica—Consumption of the Bowels—Marasmus . . 325
78. Rickets 327
79. Diabetes—Diabetes Mellitus 335
80. Purpura—Land-Scurvy 343
81. Scurvy 344
82. Anæmia 345
83. Chlorosis 347
84. Dropsy, General and Local 350
85. Beriberi—The Bad Sickness of Ceylon 355

CHAPTER III.

Diseases of the Nervous System.

PAGE
§86. Encephalitis, Meningitis—Inflammation of the Brain . . . 356
87. Apoplexy 360
88. Sun-stroke—Isolation—Sun-fever—Heat-stroke 366
89. Chronic Hydrocephalus—Dropsy of the Brain—Water in the Head 369
90. Paralysis—Paralytic Stroke 371
91. Tetanus—Lockjaw 380
92. Hydrophobia—Rabies 381
93. Infantile Convulsions—Fits of Infants 385
94. Laryngismus Stridulus—Asthma of Millar—Spasmodic Croup—Child-Crowing 388
95. Epilepsy—Falling Sickness—Fits 390
96. Chorea—St. Vitus's Dance 397
97. Hysteria 400
98. Hypochondriasis 406
99. Neuralgia 408
100. Nervous Sick-Headache 415
101. Sleeplessness 418
102. Brain-Fag 423
103. Simple Melancholia 425
104. Dementia 427
105. Mania—Insanity 428

CHAPTER IV.

Diseases of the Eye.

§106. Simple Ophthalmia—Conjunctivitis 433
107. Catarrhal Ophthalmia 434
108. Purulent Ophthalmia—Contagious Ophthalmia 436
109. Purulent Ophthalmia of Infants—Ophthalmia Neonatorum . . 439
110. Gonorrhœal Ophthalmia 444
111. Iritis 447
112. Amaurosis—Gutta Serena 451
113. Amblyopia—Impairment of Vision 458
114. Muscæ Volitantes—Spots before the Eyes 459
115. Cataract 461
116. Glaucoma 464
117. Strabismus—Squinting 466
118. Myopia—Near-sightedness 468
119. Inflammation of the Eyelids 470
120. Hordeolum—Stye on the Eyelid 471
121. Entropium—Inversion of the Eyelid; and Ectropium—Eversion of the Eyelid 471
122. Tarsal Ophthalmia—Granular Eyelid—Eczema Palpebrarum . . 472

CHAPTER V.

Diseases of the Ear.

PAGE
§123. Diseases of the External Meatus 474
124. Diseases of the Membrana Tympani 477
125. Diseases of the Tympanum 479
126. Deafness 482

CHAPTER VI.

Diseases of the Nose.

§127. Ozæna 488
128. Epistaxis—Bleeding from the Nose 490
129. Polypus Nasi—Polypus of the Nose 492
130. Loss or Perversion of the Sense of Smell 493

CHAPTER VII.

Diseases of the Circulatory System.

§131. Diseases of the Heart and its Membranes 494
132. Pericarditis 495
133. Endocarditis 497
134. Hypertrophy—Enlargement of the Heart 498
135. Angina Pectoris—Breast-Pang 500
136. Syncope—Fainting-fit—Swooning 501
137. Palpitation, and Irregularity of the Action of the Heart . . . 502
138. Intermittent Pulse 505
139. Aneurism 506
140. Phlebitis—Inflammation of the Veins 510
141. Varicose Veins 512
142. Goitre—Derbyshire Neck 515
142.*Exophthalmic Bronchocele 517

CHAPTER VIII.

Diseases of the Respiratory System.

§143. Hay-Asthma—Hay-Fever—Summer Catarrh 517
144. Croup—Inflammatory Croup 519
145. Coryza—Catarrh—Cold in the Head, and Bronchial Catarrh . . 524
146. Aphonia—Loss of Voice—Hoarseness 530

Diseases of the Respiratory System (*continued*).

PAGE
147. Bronchitis 531
148. Asthma 536
149. Pneumonia—Inflammation of the Lungs 546
150. Pleurisy 551
151. Cough 554

CHAPTER IX.

Diseases of the Digestive System.

§152. Stomatitis—Inflammation of the Mouth 561
153. Thrush—Frog—Sore Mouth 562
154. Offensive Breath 564
155. Cancrum Oris—Canker of the Mouth 565
156. Teething 566
157. Toothache 569
158. Gum-Boil 576
159. Glossitis—Inflammation of the Tongue 577
160. Ulcer on the Tongue 578
161. Tongue-Tie 578
162. Sore Throat 579
163. Relaxed Throat—Ulcerated Throat—Pharyngitis—Clergyman's Sore Throat 579
164. Quinsy—Tonsillitis 582
165. Gastritis—Inflammation of the Stomach 585
166. Chronic Ulcer of the Stomach 586
167. Hæmatemesis—Vomiting of Blood 587
168. Dyspepsia—Indigestion 589
169. Gastrodynia—Pain or Spasms in the Stomach 602
170. Vertigo 602
171. Bilious Headache 603
172. Pyrosis—Water-Brash 604
173. Vomiting—Sickness 604
174. Sea-Sickness 606
175. Enteritis 608
176. Dysentery—Bloody-Flux 609
177. Hernia—Rupture 614
178. Parasitic Disease of the Intestines—Worms 618
179. Diarrhœa—Purging 630
180. Colic—Spasms of the Bowels 636
181. Lead-Colic 638
182. Constipation—Confined Bowels 639
183. Fissure and Ulcer of the Rectum 647
184. Fistula in Ano 649
185. Hæmorrhoids—Piles 651
186. Pruritus Ani—Itching of the Anus 657

DISEASES OF THE DIGESTIVE SYSTEM (*continued*).

PAGE
187. Prolapsus Ani 658
188. Hepatitis—Inflammation of the Liver 659
189. Simple Enlargement of the Liver—Congestion of the Liver—Liver Complaint 661
190. Jaundice—Icterus 665
191. Peritonitis—Inflammation of the Peritonæum 668

CHAPTER X.

DISEASES OF THE URINARY SYSTEM.

§192. Albuminuria 669
193. Nephritis—Bright's Disease 671
194. Cystitis—Inflammation of the Bladder 675
195. Calculus—Stone—Gravel 677
196. Irritability and Spasm of the Bladder—Strangury—Difficult Urination 686
197. Incontinence of Urine—Wetting the Bed 687
198. Retention of Urine 690
199. Gonorrhœa—The Clap 691
200. Stricture of the Urethra 698
201. Spermatorrhœa—Involuntary Emissions 702

CHAPTER XI.

DISEASES OF THE CUTANEOUS SYSTEM.

§202. Erythema—Inflammatory Redness of the Skin 710
203. Intertrigo—Chafing—Soreness of Infants 711
204. Roseola—Rose-rash—False Measles 712
205. Urticaria—Nettle-Rash 712
206. Prurigo—Itching of the Skin 715
207. Lichen 717
208. Strophulus—Red-gum—Tooth-rash 718
209. Pityriasis—Branny Tetter—Dandriff 719
210. Psoriasis—Lepra Vulgaris—Dry Tetter 719
211. Herpes—Shingles—Tetter 721
212. Eczema—Catarrhal Inflammation of the Skin—Scalled-Head—Milk-crust 723
213. Impetigo 731
214. Acne—Pimples 731
215. Sycosis—Mentagra—Barber's Itch—Chin-whelk 734
216. Lentigo—Freckles 736
217. Chilblain—Chaps 736

DISEASES OF THE CUTANEOUS SYSTEM (*continued*).

PAGE
218. Ulcer 738
219. Boil 741
220. Carbuncle—Anthrax 742
221. Whitlow—Felon—Gathered Finger 744
222. Corn 746
223. Enlarged Bursa—Housemaid's Knee—Miner's Elbow 747
224. Bunion 749
225. Nævus—Port-wine Stain—Mother's Mark; and Nævus Pilaris—Mole 750
226. Sebaceous Tumour—Wen 752
227. Warts 752
228. Parasitic Diseases of the Skin 753
229. Scabies—Itch 756
230. Irritation caused by Stinging-Insects and Plants 758
231. Poisoned Wounds 760

CHAPTER XII.

MISCELLANEOUS DISEASES.

§232. Angular Deformity of the Spine—Kyphosis—Lordosis—Pott's Curvature 762
233. Lateral Curvature of the Spine—Skoliosis 765
234. Morbus Coxæ—Scrofulous Disease of the Hip-Joint 769
235. Abscess 770
236. Ganglion 774
237. Obesity—Corpulence 774
238. Old Age, and Senile Decay 777

CHAPTER XIII.

ACCIDENTS.

§239. Asphyxia—Apnœa (from Drowning)—Suffocation 789
240. Depression from Cold 793
241. Concussion of the Brain 793
242. Burns and Scalds 795
243. Contusion—Bruise 798
244. Sprain—Strain 799
245. Foreign Bodies 801
246. Wound 805
247. Fracture—Broken Bone 809
248. Dislocation 813
249. Exhaustion of the Muscles—Fatigue—Over-exertion 817
250. Poisons 818

PART IV.

Materia Medica.

	PAGE
1. Acidum Fluoricum	819
2. Acidum Muriaticum	820
3. Acidum Nitricum	820
4. Acidum Phosphoricum	822
5. Acidum Sulphurosum	823
6. Aconitum Napellus	824
7. Æsculus Hippocastanum	828
8. Aloe Socotrina	828
9. Ammonium Carbonicum	829
10. Ammonium Muriaticum	829
11. Antimonium Crudum	831
12. Antimonium Tartaricum	831
13. Apis Mellifica	833
14. Apocynum Cannabinum	834
15. Argentum Nitricum	834
16. Arnica Montana	836
17. Arsenicum Album	839
18. Atropine	842
19. Aurum Metallicum	844
20. Baptisia Tinctoria	845
21. Baryta Carbonica	846
22. Belladonna	846
23. Bismuth	849
24. Bryonia Alba	850
25. Cactus Grandiflorus	852
26. Calcarea Carbonica	852
27. Calcarea Phosphorata	854
28. Calendula Officinalis	855
29. Camphora	855
30. Cannabis Sativa	857
31. Cantharis Vesicatoria	858
32. Carbo Vegetabilis	859
33. Caulophyllum Thalictroides	860
34. Causticum	861
35. Chamomilla Matricaria	862
36. Chimaphila Umbellata	863
37. China—Cinchona Officinalis	864
38. Chloral Hydrate	866
39. Cimicifuga Racemosa—Actæa Racemosa	867
40. Cina Anthelmintica	870
41. Cocculus Indicus	871
42. Coffea Cruda	872
43. Colchicum Autumnale	873
44. Collinsonia Canadensis	874
45. Colocynthis	875
46. Conium Maculatum	876
47. Croton Tiglium	877
48. Cuprum Metallicum	877
49. Digitalis Purpurea	878
50. Dioscorea Villosa	879
51. Drosera Rotundifolia	880
52. Dulcamara	881
53. Eupatorium Perfoliatum	881
54. Eupatorium Purpureum	882
55. Euphrasia Officinalis	883
56. Ferrum	883
57. Ferrum Phosphoricum	884
58. Gelseminum Sempervirens	885
59. Glonoine	888
60. Graphites	889
61. Hamamelis Virginica	889
62. Helleborus Niger	890
63. Helonias Dioica	891
64. Hepar Sulphuris Calcareum	891
65. Hydrastis Canadensis	892
66. Hyoscyamus Niger	894
67. Ignatia Amara	895
68. Iodium	896
69. Ipecacuanha	898

MATERIA MEDICA (*continued*).

	PAGE
70. Iris Versicolor	900
71. Kali Bichromicum	901
72. Kali Bromidum	902
73. Kali Hydriodicum	903
74. Kreasotum	904
75. Lachesis	905
76. Leptandra Virginica	906
77. Lycopodium Clavatum	907
78. Mercurius	908
79. Mezereum	913
80. Millefolium	915
81. Nux Vomica	915
82. Opium	918
83. Petroleum	919
84. Phosphorus	921
85. Phytolacca Decandra	923
86. Platina	925
87. Plumbum	926
88. Podophyllum Peltatum	926
89. Pulsatilla Nigricans	928
90. Ranunculus Bulbosus	930
91. Rhus Toxicodendron	930
92. Robinia Pseudo	932
93. Ruta Graveolens	933
94. Sabina	933
95. Sanguinaria Canadensis	934
96. Sarza	935
97. Secale Cornutum	936
98. Senecio Aureus, et Gracilis	937
99. Sepia	938
100. Silicea	939
101. Spigelia Anthelmia	940
102. Spongia Tosta	941
103. Staphysagria	941
104. Stramonium	942
105. Sulphur	943
106. Taraxacum	946
107. Terebinth	946
108. Teucrium	947
109. Urtica Urens	947
110. Uva Ursi	948
111. Valerian	948
112. Veratrum Album	948
113. Veratrum Viride	949
114. Viola Odorata	952
115. Viola Tricolor	953
116. Zincum	953
Antidotes	954

PART V.

Poisons.

1. Arsenic	957
2. Mercury	960
3. Lead	962
4. Copper	964
5. Antimony	964
6. Nitre—Nitrate of Potash	965
7. Ammonia	966
8. Phosphorus	966
9. Acids	967
10. Oxalic Acid	968
11. Carbolic Acid	969
12. Oil of Tar	970
13. Colchicum	970
14. Opium	971
15. Alcohol	975
16. Chloroform—Ether	978
17. Hydrate of Chloral	979
18. Deadly Nightshade—Belladonna	979
19. Gelseminum	980
20. Prussic Acid	980
21. Monkshood—Aconite	982
22. Foxglove—Digitalis	983
23. Tobacco	983

MATERIA MEDICA (*continued*).

	PAGE		PAGE
24. Nux Vomica—Strychnia .	983	27. Carbonic Acid and other poisonous Gases . .	985
25. Poisonous Fungi . . .	984		
26. Spanish Fly . . .	985		

PART VI.

Clinical Directory.

	PAGE
Clinical Directory, or Alphabetically-arranged Table of Diseases and Symptoms, with Epitome of Treatment	987–1042
Formulæ	1043–1046
List of Remedies and Attenuations	1047–1052
Index	1053

PART I.

Introductory.

CHAPTER I.

HYGIENIC OBSERVATIONS.

1.—Hygiene.

Medical Hygiene may be described as that branch of science which treats of the preservation of health by means which contribute to the most perfect development of the body, rendering life most vigorous, decay less rapid, and death more distant. It embraces various influences operating upon the physical condition of individuals and communities, whether in promoting their material good, or preventing their deterioration. It consists essentially in the prevention of disease by the removal of its avoidable causes, and, consequently, involves legislative control, that the safety of the whole may be protected against the errors of the few. In its widest sense, the term Hygiene implies rules for the perfect culture of the mind and body. "If our knowledge were exact, and our means of application adequate, we should see the human being in his perfect beauty, as Providence probably intended him to be; in the harmonious proportions and complete balance of all parts, in which he came out of the hands of his Maker, in whose divine image, we are told, he was in the beginning made" (*Parkes*).

Such a condition, if ever attainable, is, we fear, far distant at present. But if not fully attainable, it is at least our duty to aim at that millennium of sanitary philosophers when all disease

is to be *prevented*, not cured. This Text-book is our contribution towards that desirable consummation; and although our knowledge and powers are incomplete and limited, sufficient is herein pointed out to change the whole aspect of the world. While, however, we have in this volume pointed out the main causes of physical deterioration and disease, and how these may be avoided or controlled, the well-being of individuals and communities must essentially depend on personal and united efforts and self-restraint. "Sanitary improvements in man's material surroundings will not compensate for social transgressions against laws of morality; for public virtue is essential to public health, and both to national prosperity" (*Dr. G. Wilson*).

Our observations on Hygiene are necessarily restricted and fragmentary, but withal highly important, and their general adoption would be fraught with rich advantages. It is hoped that, as the result of the education of the masses, a solid groundwork may be laid for the promotion of the national health. The rudiments of medical hygiene may be taught and rendered attractive in schools, and should not be regarded as of less moment than the languages of extinct nations, or the records of ancient history. The public press, and more especially popular medical works, may so augment the general knowledge of the causes of disease, as to prevent much existing suffering, and diminish unnecessary waste of human life. It is, indeed, satisfactory to know that these means, as far as they have been adopted, have already largely contributed to these desirable results.

2.—General Plan of Dietary.

Homœopathy is not a system of diet, but of medical treatment. Extended observation proves that the curative action of remedies, chosen according to the homœopathic law, is but little affected by the food or beverages ordinarily taken; hence, beyond the prohibition of certain articles which disagree with the patient, interfere with the bodily functions, or impose on weak or diseased organs a task to which they are unequal, homœopathic physicians interfere but little with their patients' diet.

The food of the *invalid*, however, must be regulated according to the nature, stage, and progress of the malady from which he is suffering; therefore, the diet appropriate in various acute and chronic diseases will be found prescribed in the various Sections of this Text-book in their appropriate places.

Circumstances regulating the Dietary.

The following, and other points, must be kept in view in constructing dietaries :—

(1) *Work.*—Besides maintaining the body in health, food is the source of the active energy exhibited in all work or mechanical motion. An active life and great bodily exertion necessitate a larger and more nutritious supply of food than a state of inaction; the physical expenditure, and consequently the necessity for reparative material, being greater in the former than in the latter. It follows, therefore, that the diet must be regulated by the amount of work to be performed.

(2) *Exercise.*—The opportunity for taking regular exercise in the open air should be taken into consideration; for with such exercise active circulation is maintained, oxygen is absorbed, nitrogenous products are eliminated, and thus animal diet may be the most conducive to health. On the other hand, quiet and sedentary habits require less generous diet, and much meat would clog the system with its surplus nitrogenous food.*

(3) *Age.*—Milk and farinaceous substances should form the *staple* food up to the ninth or tenth year. At fourteen years of age a girl requires more nutriment than a woman A *growing* young man, who does the same amount of work as an adult man, requires more food than the latter. When growth and tissue-changes are at their maximum, food must be good in quality and abundant in quantity.

(4) *Individual differences.*—A weakly person who eats little, requires food of a better quality and nicer flavour than one of robust constitution and hearty appetite. Peculiarities also exist in the power of digesting different kinds of food, which

* It is related that in Queen Elizabeth's court a maid of honour breakfasted on beef and beer; no mention is made of bread. This may have preceded a long ride in the country for falconry, but is scarcely suitable for the in-door life of the mother of a family.

render it impossible to lay down hard-and-fast rules of diet applicable to all persons alike. What are termed the "fancies" of delicate persons, especially of children, are often natural instincts, pointing out what is beneficial to the system or the reverse.

(5) *Climate.*—In cold climates, the food should contain an excess of fatty constituents; but in warm climates the starchy or farinaceous should preponderate. The same observation applies to variations of the seasons. More food, too, is required in cold countries, and in cold seasons, than in hot.

Meals.

Physiology and experience alike teach that three meals a day, at regular hours, with no food between, best meet the requirements of the body in health. The exact arrangement of the meal-hours must necessarily depend on the mode of life, and individual peculiarities; but it may be laid down as a broad principle that not less than five hours should elapse between meals, that time being required for digestion. Food taken between one meal and another interrupts the digestive process, and soon occasions dyspepsia, as well as a host of nervous and other disorders. Should the appetite or a feeling of want arise during the interval, it should be treated as an accidental circumstance, or a symptom of nervous disorder, rather than the indication of any real need of the system. For invalids and convalescents, smaller meals, at shorter intervals, may be necessary, till the stomach is able to deal with a full meal. The following suggestions on the dietary arrangements of persons in health, with occasional modifications, and allowing for individual differences, will generally be found suitable.

Breakfast. *Breakfast* at eight a.m. Except for growing children and convalescents, it is generally desirable that some little time should elapse between rising and taking breakfast, and this time, if possible, should be spent in some out-of-door occupation, as walking, riding, gardening, etc.

This meal may consist of bread or dry toast, with a moderate quantity of fresh butter, to which a new-laid egg, boiled three minutes, may be added; or a little home-fed cold boiled bacon, chicken, game, or fish may be allowed to those who take much

bodily exercise. For growing boys and girls at schools, the bread-and-butter, with poor tea or coffee, which is in some cases exclusively and invariably provided for the morning and evening meal, is very insufficient.

A breakfast-cupful of cocoa, prepared from fresh nibs, according to the directions given in section 6, page 54; or black tea, may be substituted; but the latter is less nutritious. For some, milk-and-water is more digestible.

Breakfast is an important meal, and its digestion ought never to be endangered by taking it too hurriedly, or commencing a quick walk, or other active mental or physical exercise, immediately after it. It would be an immense gain to the hard-working city man, to make it a uniform habit to rise sufficiently early to allow ample time to enjoy a leisurely breakfast, and sufficient time after for its digestion to have made some progress before again taxing the physical or mental powers. Mental or physical exertion, especially the resumption of responsible duties by conscientious persons, at once diminishes the power and activity of the involuntary muscles which carry the mass of food along the digestive track. Thus the "mechanics of nutrition" are slackened, the meal just taken "is heavy in the stomach," discomfort, flatulence, irritability, and other functional disorders are inaugurated.

Dinner. *Dinner*, at one p.m. Wholesome fresh meat and fresh vegetables—potatoes, cabbage, broccoli, peas, French beans, etc.—carefully proportioned, plainly cooked, served hot, and properly and slowly masticated. These should be varied from day to day, with occasional additions, in moderate quantities, of fruit or farinaceous puddings; and fish substituted once or twice a week for other animal food. Variety should be secured by different methods of cooking the same food, as well as by varying the food itself. A great improvement in health takes place, especially in the case of children, when this suggestion is carried out. Highly-seasoned dishes, condiments, pickles, salt and dried meats, rich or heavy pastry, and cheese should be excluded from the dietary of persons who wish to be healthy, especially of those whose habits are sedentary, or who use their brains consider-

ably. Weakly persons who are obliged to take much exercise may drink a small quantity of malt liquor (never exceeding half a pint), if they are benefited by it; but in the great majority of cases fermented liquors had better be avoided, and a few sips of filtered water, or a wine-glass of claret, hock, or other light, still wine, diluted with an equal quantity of water, substituted. In the generality of cases, especially boys at school, persons are only rendered heavy and sleepy by the use of beer at this meal. But too much cold water at dinner lowers the temperature of the stomach, and so interrupts digestion. Taking wine after dinner is a luxurious, not a healthy habit; and all that can be said of it, from a hygienic point of view, is, *the less taken the better*. For dessert, apples, pears, oranges, grapes, peaches, strawberries, gooseberries, and some other fruits.

Tea. *Tea* may be taken at six or half-past, and include one or two small cups of black tea, or cocoa prepared from the nibs, with bread or dry-toast, butter, fruit, or marmalade, as may be found most digestible or agreeable. In schools, the addition of water-cress, lettuce, radishes, etc., is very desirable. If it be the last meal in the day, and the person be not plethoric, and taking a great amount of physical exercise, the meal may include some light meat, chicken, or white fish when in season.

Late Dinners. A different arrangement is necessary for persons who dine late—say at six, or half-past six, p.m., as then a *luncheon* should be taken at about one p.m., which may consist of a plate of good beef soup, with vermicelli, rice, or toasted bread in it. Some food ought to be taken; the custom of only taking a biscuit or some such trifle is pernicious, for the system becomes too exhausted for the proper digestion of a full, late dinner. If meat have been taken at breakfast, bread-and-butter, biscuits, or sandwiches will suffice; wine and malt liquors are better avoided. From six to half-past, dinner may be taken, and include the dishes already mentioned. The custom of taking tea, or a simple warm liquid meal three or four hours after dinner, is a very salutary one, as the warm liquid assists the elaboration and absorption of the chyle from the chyme, which is effected at

this period. But the introduction of solid food, especially large quantities of buttered toast or rich cake, would seriously interfere with this process. A cup of black tea, with a little sugar and milk, or a slice of lemon instead of milk, forms a useful and agreeable beverage, and serves to remove all acrid materials left undissolved by digestion, and which, if not carried off, might disturb that rest for which the appropriate hour now approaches.

In all cases in which the circumstances permit, the dinner-hour may be advantageously deferred until six or seven p.m., when the engagements of the day are concluded, and persons are not likely to be disturbed by professional or business calls, so that sufficient time may be devoted to it, and that rest (not sleep) taken after it which the principal meal requires, but which it is often impossible to give to it in the middle of the day. Persons much pressed should not ingest full meals during the hours of occupation; a light repast is then best, the principal meal being taken in the evening, when the work of the day is finished. Heavy meals taken during the hours of physical or mental labour, without sufficient rest, are almost certain, eventually, to lead to derangement of the digestive organs.

Supper. If under exceptional circumstances this be necessary, it should be of the lightest and simplest character. A small quantity of farinaceous food, which may be easily digested, is all that is required. For example, in the case of school boys and girls, who have dined early, a light repast of bread and milk, or porridge and milk, would be preferable to the usual supper of bread-and-cheese and beer.

Heavy suppers occasion much discomfort, and tax needlessly the digestive powers of the stomach when they should be undisturbed. Even under the arrangements already recommended,—eating only three times a day, at five hours' interval,—the stomach is kept almost continuously at work from breakfast until the last meal is disposed of, namely, about ten o'clock. But if food be eaten shortly before bed-time, while other members of the body are at rest, the stomach is kept busily occupied till the morning, and has to resume its

work again at breakfast. For obvious reasons, then, heavy late meals are unmitigated evils.

Objectionable, however, as it is, to go to bed with a full stomach, it is also objectionable to go to bed with an empty one. Restlessness and sleeplessness accompany repletion; they also accompany fasting. The student or literary man whose labours continue far into the night, should therefore be careful to have some light nourishment some time before he retires.

3.—Comparative Estimate of Brown and White Bread.

Bread, aptly termed the "staff of life," is the common food of all classes; its importance, therefore, seems to justify a brief inquiry into the kind most conducive to health. We may at once state that our object is to impress upon the reader that *no single constituent part of our food is capable of acting by itself alone*, and that *one missing element may make the others partly or even wholly inefficient.* This applies forcibly to the subject of this Section. Wheat contains the following constituents, which slightly vary in different samples :—

Water . . .	11 per cent.	Gum . . .	4 per cent.
Gluten . .	13 ,,	Oil . .	2 ,,
Starch . . .	60 ,,	Bran (the thin external husk) .	2 ,,
Sugar . .	8 ,,		

These elements are not *uniformly* distributed throughout a kernel of wheat. Immediately beneath the thin external covering is a layer of darkish-coloured matter, very rich in gluten, and containing, in minute drops enclosed in its cells, most of the oil in the wheat. In the ordinary course of grinding and dressing, a large portion of this covering is removed from the superfine flour, as it is not so readily reduced to a fine powder, and hence is rejected with the middlings and bran. Beneath this dark layer is the heart of the kernel, which is very white, and chiefly composed of starch, and from it the best-looking and finest flour is made.

This portion is not absolutely destitute of gluten, nor is the dark portion free from starch; but each exists in excess in the parts indicated.

The mineral ingredients of a kernel of wheat are also unequally distributed. They are, chiefly—phosphoric acid, potash, soda, magnesia, oxide of iron, sulphuric acid, salt, and silica; and in superfine flour they exist in the proportion of a little over 1 per cent.; in the next quality, between 3 and 4 per cent.; still coarser flour, about 5 per cent.; and bran, 7 per cent. Thus it will be seen that fine flour contains but a small portion of those mineral ingredients which are found in wheat before grinding, a large portion being cast off with the bran.

But the mineral constituents of the vegetables we consume are as indispensable to the human organisation as any other; experiments upon the inferior animals prove that the withdrawal of these elements from vegetable food is prejudicial, and that animals so fed perish from starvation. Mineral ingredients form the nourishment for important parts of the animal economy, and, dissolved in the blood, are taken up at points where they are necessary to sustain local parts. Thus, phosphate of lime is required by the bones; phosphates of magnesia and potash by the muscles; soda by the cartilages; phosphorus by the brain; silica by the hair, teeth, and nails; and iron by the red globules of the blood and black colouring matter within the eye.

The dark portion of the wheat kernel which chiefly contains the gluten, its most nutritious constituent, is almost entirely separated in the process of dressing; while the central, almost wholly starch, and of much less value to the body, is retained. In thus rejecting the dark portion immediately underlying the bran, which is almost entirely removed with it, and used for the food of our cattle, we lose the most nutritious as well as the sweetest portion of the grain.

In the preparation of wheat for the purpose of food, we should bear in mind that its value as food depends not upon the quantity of starch it contains, but upon the amount of gluten; and any process which diminishes this element is most objectionable.

The mere bran, without its underlying membrane, may be partially removed without much detriment; for, though useful in obstinate constipation, it is irritating to the mucous membrane of some persons, and objectionable for those who are actively employed, as it facilitates the passage to or along the alimentary canal too rapidly for complete digestion or assimilation. In such cases the coarse portions of bran may be removed; but the wheat should not be entirely divested of the bran and the darker layer referred to; for this is to sacrifice its nourishing properties for the mere fineness or whiteness of bread, and to please the eye at the expense of nutrition.

Our supply of corn would suffice to sustain millions more than it does if we could indoctrinate the people, in this and other countries, correctly to estimate the advantages which brown bread has over white. Liebig very strongly condemns the custom of preferring white bread, and especially on account of the loss of phosphates, and states that 1,000 parts of wheat-corn contain 21 parts of the nutritive salts, but fine flour only 7 parts. This difference is very great—far greater than is at all adequately appreciated.*

Dr. Boudens, a French physician, states that during the Crimean war the Russian prisoners, accustomed to a very coarse brown bread, were inadequately nourished by the French rations, and that it was found necessary to increase them. Magendie has proved by experiment that a dog will die if fed on white bread, but if brown bread be given him his health remains good. The subject merits the earnest consideration of the heads of large households. In the case of the working population, in whose diet bread is the chief constituent, they are sure to suffer from any deficiency in its nutritive properties, especially children and growing young persons, who require suitable and sufficient materials for the formation of the various parts of the animal frame. On the

* The necessity for the presence of the nutritive salts, in sufficient quantities, may be illustrated by the following fact:—It has been observed that when fodder is given to sheep consisting of 2½ lbs. of winter straw and 3 lbs. of potatoes, a portion of the latter passes away undigested; but that if ¼ lb. of peas be added, the starch is retained, and the animal rapidly gains in weight, which it did not before. Now peas are rich in nutritive salts, and they contributed, in the above instance, to render the starch available for the nutrition of the sheep.

other hand, those whose tables are daily supplied with edibles both abundant and varied, are less likely to suffer from the diminished nutritive value of any single article of food, because the constituents which have been eliminated from the bread, may have been appropriated as food for animals which furnish food for man. To them the supply of house bread is not so important as to those whose range of diet is limited.

The now uncommon *barley-bread* is very nourishing. So also is the *oat-cake* of Scotland and the North of England.

4.—Remarks on various Articles of Food.

Potatoes.—The potato is a good anti-scorbutic, and when no other vegetables are eaten, eight to twelve ounces should be taken daily by an adult. A too exclusive use of potatoes, as in the case of the Irishman, gives rise to an enlarged and prominent stomach, due, at least in part, to the necessity of ingesting a large bulk of the food in order to derive the necessary amount of sustenance.

Preparation for the table.—The best method of cooking potatoes, certainly from September to June, is by steaming; by this process heat penetrates everywhere, and there is no loss of salts. For this purpose a saucepan, one-fourth full of boiling water, is required, into which a closely-fitting steamer is placed, containing the potatoes, the latter being so packed as to allow a free passage for the steam. If the potatoes are boiled, the skins should not be previously removed, or a large amount of salts will pass out.* The addition of salt to the water is advantageous, for it helps to retain the natural salts. The boiling should be thorough, otherwise the starchy grains are undigested. From twenty-five to thirty-five minutes is the time usually required, according to the kind of potato boiled. Potatoes should be served up immediately they are cooked, and not, as is too frequently the case, placed over the fire at half-past eleven or twelve for a one o'clock dinner.

* Dr. Letheby estimated the waste when the skins are removed at 14 per cent., when not removed at only 3 per cent.

Towards the end of the season, old potatoes are improved by being peeled over-night and put into cold water, by which process they regain, in a measure, their natural colour and consistency. Potatoes are rendered more digestible by being finely mashed, and mixed with a little red gravy as it runs from the cut surface of a joint.

Choice of potatoes.—They should be large and firm to the touch, should present no evidence of disease or fungi, should not have been exposed to frost, neither should they be germinating or growing, for then the starch is undergoing a saccharine metamorphosis. Further, when cooked they should not be close, watery, or waxy; but floury or mealy. The best sorts are the Kent, York, and Scotch regents, the Forty-fold, and the Fluke. The regent is a round, rough-skinned potato; the forty-fold has a pinkish skin, and is extremely white and mealy; the fluke, though a great favourite, is close at one end, and sometimes turns black when cooked. Young potatoes are indigestible.

Carrots form a wholesome food, not well adapted to those who suffer from indigestion or flatulence, but forming a useful table variety. The more of the soft, red, outer part, and the less of the yellow core, the better.

Turnips possess little nutritive value, as they contain, according to Dr. Letheby, 91 per cent. of water. They, nevertheless, are an agreeable vegetable; so also are the green tops gathered in spring from such roots as have borne the winter.

Tomatoes within the last few years have become very popular as an article of food. In the *Homœopathic World* for November, 1890, their uses and abuses are commented upon.

Cabbages.—All the varieties of cabbage are useful, not so much on account of their nutritive value, as for the variation of diet, the salts they supply, and their anti-scorbutic properties. They are not easily digested, and on account of the large proportion of sulphur in their composition, produce unpleasant flatulence.

Onions, as grown in this country, are chiefly useful for condiment and flavouring; but as imported from Spain and

Portugal are sufficiently mild and sweet to be stewed and roasted for the table. Onions act as anti-scorbutics.

Spinach (slightly laxative); *Rhubarb* (with a large proportion of oxalate of lime); Laver (soaked in water before cooking, to remove saline matter); Sea-kale, Asparagus (possessing diuretic properties); Lettuce, Water-cress, Mustard-and-Cress, are also useful. *Cucumber*, raw, is cold and indigestible; stewed, is light and wholesome. *Vegetable Marrow* and *Pumpkin* are easily digested, but afford little nourishment. *Mushrooms* are not adapted to weak stomachs, but are esteemed for their delicacy. Sometimes they cause colic, vomiting, and purging. The difficulty of distinguishing the edible from the Poisonous *fungi* has often led to serious consequences. (See on poisons, Part V.)

Preserved Vegetables.—These may supply the place of fresh vegetables when the latter are unobtainable. In such case, to secure variety, it is desirable to alternate them, thus preserved potatoes might be taken one day, and a dish of rice and cabbage, or pease-pudding, the next.

Eggs.—As an article of diet akin to flesh and fish, fresh eggs are very valuable, for they contain albumen and fat in very digestible forms. The shell, composed of carbonate of lime and intended for the protection of the inner substance and for the supply of earthy particles for the growth of the young bird, is penetrated by innumerable pores, through which air passes to the bird during the progress of incubation; this air in time deteriorates the eggs, and eventually causes decomposition. The yolk, like flesh and fish, consists of fat intermixed with, and held in a state of emulsion by, albuminous matter; while the white, which forms the largest portion, is free from fat, but very rich in albumen; in eating eggs, therefore, the deficiency should be supplied by taking butter or other kind of fat along with them. The quality of eggs varies with the food of the hen.

Preparation.—An egg should be boiled about three minutes only. If cooked till it is hard, the albumen is rendered insoluble by the gastric juice and causes constipation; it should, therefore, be particularly avoided by dyspeptics, and by persons recovering from illness, before the full powers of

digestion have been regained. If the insoluble portions of hard-boiled eggs are delayed in the stomach and intestines, they putrify, and the sulphuretted hydrogen and ammonia evolved become poisonous to the intestinal canal. In general, boiled eggs are better avoided by convalescents till the gastric functions are fully restored. If the shell of an egg be cracked its contents may be prevented from being forced out while boiling by first making a hole through the large end by means of a pin. Poached eggs should be allowed to drain for a moment before serving. If placed on toast it should be dry, and butter to taste eaten with them. The egg may also be taken raw, beaten up with a wine-glass of milk, in which form it is quickly absorbed, and is particularly advantageous in diseased or debilitated conditions.

Tests of Freshness.—An egg should be examined by holding it before a light; a fresh one is more transparent at the centre, and a stale one at the top. Eggs which have been kept become cloudy. The freshness of an egg may also be approximately determined by placing it in a saturated solution of salt (1 of salt to 10 of water): good eggs sink, bad float. Very bad eggs will even float in fresh water.

Preservation.—If the pores which permeate the shell are filled by covering the new-laid egg with gum, oil, or other fat, to exclude the air, it may be kept fresh for an indefinite time. Packing in salt, or placing in lime-water, tends to preserve eggs. By covering the eggs with a solution of bees-wax in warm oil (1 part wax to 2 parts oil) they may be kept for two years.

Butter.—This valuable article of diet, when perfectly fresh, is less likely than any other form of fatty matter to disagree with the stomach; when stale or rancid it will cause derangement. There are ready means of detection through the senses of sight, taste, and smell, when it is adulterated. Pure butter should be of a uniform rich yellow appearance; when a streaky look is imparted by quickly passing over it a clean knife the presence of adulterants is always to be suspected. When melted it should yield a clear-looking oil, with but slight deposit of water or other substances. When placed on the tongue it melts quickly and

leaves the tongue perfectly smooth; while, on the contrary, there will be a sense of roughness, a granular taste, and the peculiar flavour of the adulterant, as the results of this test when butter is adulterated. The odour of butter is very persistent, and therefore does not so well mark its purity or the reverse. Milk yields on an average $5\frac{1}{2}$ per cent. of butter. Though butter is generally churned from cream, it would be produced in greater quantity from entire milk, but as the substitution of milk would necessitate more labour and the use of larger vessels, it has not been generally adopted. The churning of cream is best performed at a temperature varying from 50° to 55° Fahr., and the temperature is generally regulated by placing hot or cold water according to the season in the outer vessel. Milk requires a temperature of 69° Fahr. By churning, the membrane covering the cells which contain the fatty portions of the cream becomes disintegrated; if the process be performed too quickly the butter is rendered insipid, if too slowly it is soft and frothy.

Cheese.—In the Second Section of this Text-book we have discountenanced the use of cheese as an article of diet for supper; but although difficult of digestion by sedentary persons, and always unsuitable at bed-time, it may at other times be freely taken by persons of sound digestion, who enjoy plenty of daily open-air exercise. "On account of its richness in nitrogenous matter, cheese constitutes an article of considerable dietetic value. Amongst the poorer inhabitants of rural districts it forms an important constituent of the daily diet, serving to supply the nitrogen which is deficient in the bread or other kind of vegetable food, which is employed as the staple article of subsistence. By the less indigent classes, where the meat consumed suffices to supply the nitrogen required, cheese is rather employed as a condiment, or relish" (*Pavy*).

Milk.—Like eggs, milk contains all the ingredients necessary for the growth and sustenance of the body.

Cow's milk, when pure, has the following properties: perfect opacity, a full white colour, freedom from deposit, and a volume of cream varying from 6 to 12 per cent., which proportion may be discovered by means of a graduated glass

vessel. Its specific gravity is from 1028 to 1032; a sp. gr. less than 1026 indicates great poverty in the milk, or an addition of water. Thus, by means of a lactometer and a graduated glass vessel, adulteration may be detected. Treacle, salt, and turmeric are sometimes employed, as a disguise, when water has been added in any great volume.

The following table, compiled from *Payen*, shows the constituent parts of milk of different animals:

	Woman.	Cow.	Goat.	Sheep.	Ass.
Nitrogenous matter and insoluble salts	3·35	4·55	4·50	8·00	1·70
Butter	3·34	3·70	4·10	6·50	1·40
Lactine and soluble salts	3·77	5·35	5·80	4·50	6·40
Water	89·54	86·40	85·60	82·00	90·50
	100·	100·	100·	100·	100·

The nitrogenous matter is chiefly caseine, which forms curd and cheese. Lactine is a form of sugar. From the table it appears that cow's milk is most like woman's, but heavier, and that sheep's milk is very rich. Asses' is most easily digested by the invalid, because it contains less caseine and butter.

The milk of the Alderney cow yields the most butter, that of the long-horns, the most caseine. The milk drawn at the end of the milking contains more cream than that of the beginning. The afternoon milk is richer in butter and caseine than the morning. Cows fed on good pasture land yield better milk than any stall-fed cattle, and if they feed on poor diet, or strong plants, or decayed leaves (in autumn) the milk is proportionately deteriorated.

Condensed Milk.—By analysis, Mr. Wanklyn found the condensed milk of the Anglo-Swiss, Newnham, and English condensed milk companies, to be pure milk, condensed by the abstraction of a certain amount of water, and sweetened with sugar, the preserving agent. As one volume of this milk equals, in nutrition, four volumes of fresh milk, three parts water should be added. Preserved milk is not desirable for infants on account of the cane-sugar it contains, a totally different constituent from sugar-of-milk. Though the assimilating powers of the infant may cause it apparently to thrive and grow fat upon this food, it may nevertheless be lacking in stamina, and more frequently such milk will produce flatu-

lence, diarrhœa, or constipation. The best substitute for the natural food of the infant is cow's milk thus altered: To half a pint of milk add half a pint of water and a quarter of an ounce of sugar-of-milk. Owing to outbreaks of fever in London some years ago, which were traced to infected milk, many persons adopted the precaution of boiling all milk before using it, and thus the disease-germs, which it may have contained, became innocuous. This is a good plan for persons resident in towns. But when used as a substitute for maternal milk, cow's milk should not be boiled, but only raised to the temperature of breast milk by the addition of warm water.

Preserved Meat.—Preserved meat is not as nourishing as the same amount of properly-cooked fresh meat, on account of the over-cooking demanded by the process. It has the recommendation, however, of being much cheaper than fresh meat. It may be rendered more palatable by being minced and warmed, or stewed with vegetables, but to prevent further loss of nutritive properties it is best eaten cold.

Poultry, Game, etc.—The flesh of birds, unlike that of beasts, is uniform in texture and free from intermixture of fat; and all parts may be used for food. The flesh of *Fowl*, *Turkey*, and *Guinea Fowl* is white, delicate, tender, and easy of digestion, and is therefore well adapted for the invalid. The flesh of *Ducks* and *Geese* is strong, hard, rich, and difficult of digestion; and is therefore not suitable for the sick-room. Sexless birds, as the capon and pullet, grow larger, fatten better, and are more tender and delicate than others. *Pheasant*, *Partridge*, *Grouse*, *Woodcock*, *Snipe*, and *Quail* are not so fat as domestic poultry; the flesh is savoury, tender, easy of digestion, and strengthening. The delicate flavour improves by keeping. Game is thus valuable to the invalid, and can often be taken more easily and with greater advantage than meat or poultry. *Wild Fowl* is too strong for use in the sick-room; the flesh is close and firm, and requires strong digestive powers. *Pigeons* and small birds may be taken. *Rabbit* and *Hare* also form suitable dishes for invalids. The flesh of the former, although tender, is close and firm, and therefore not very easily digested; the flesh of the latter is savoury and stimulating.

Fish.—This is an invaluable article of food. Dr. Davy, in "The Angler and his Friend," states that fish-eaters are "especially strong, healthy, and prolific. In no other class than in that of fishers do we see larger families, handsomer women, and more robust and active men." Fish, especially white fish, is less stimulating than meat, contains little fat, is easily digested, and therefore forms the most suitable aliment for invalids, the dyspeptic, the debilitated, and the brain-fagged. Indeed, in consequence of the large proportion of nitrogenous matter in the composition of fish it is especially adapted for all those upon whom there are great demands for nervous energy.

Salmon stands pre-eminent as a delicacy, and more nearly resembles meat than other fish; fat is intermixed with the muscular fibre and underlies the skin, particularly of the abdomen; it is therefore rich, too rich for most invalids. *Mackerel*, *Herring*, *Pilchard*, *Sprat*, and *Eel* are also fatty in their composition. These are less suitable than the white fish for those whose powers of digestion are feeble. These are *Whiting*, *Sole*, *Haddock*, *Flounder*, *Cod*, *Turbot*, *Brill*, etc. Their flesh contains little fat, except in the liver. *Whiting*, the chicken of fish, is the most delicate and easy of digestion. *Sole* possesses the same excellences, and deserves its popularity in the sick-room. *Haddock* is firmer, not so delicate, nor so digestible. *Flounder* is tasteless, but otherwise suitable. *Cod* is close, firm, tough, and indigestible by a weak stomach. *Turbot* has richer flavour, but does not stand high as food for invalids. *Brill*, though inferior, is better; the skin of both, when boiled, appears to be gelatinous, but, though preferable as a delicacy for the healthy, is not suitable for the weak.

The quality of all fish is superior before the spawning, when it is "in season." Fish caught from the deep seas are better than those from shallow bays. Freshwater fish from deep, clear water, with stony bottom, are better than those from muddy shallows. "What herring," says Dr. Davy, "is equal to that of Loch Fyne? what haddock equal that of the Bay of Dublin? Of freshwater fish what a contrast there is between the lake trout and the brook trout! the

one well-fed, well-flavoured, of the colour of salmon, the other small, colourless, and insipid. What a contrast between either of these and the trout of bog water! the latter black, soft, ill-formed, and ill-tasted. What a contrast, again, between the trout inhabiting a stream in a fertile limestone district fed by springs, fluctuating little, and the indwellers of the mountain stream of a primitive country, subject to great fluctuations—one day a raging torrent, in a brief space run out and all but dried up! As with other animals, whether beast or bird, domestic or wild, much, we know, as to their quality, depends on their feed, its kind and quantity; and so with fish."

A sign of the freshness of fish is its firmness and rigidity. This is due to the *rigor mortis*, which passes off after a while. For the invalid, it should always be *boiled* or *broiled;* the fat added in *frying* renders the fish less digestible. Dried, salted, smoked, or pickled fish should not be seen in the sick-room. A little fresh fish, well boiled, served with bread-and-butter, without sauces and seasonings, may frequently tempt the fastidious, dainty appetite.

Shell-fish is on the whole unsuitable for the invalid. It is less digestible than other kinds of food, less likely to agree, and in some persons produces gastric irritation and disorders, and in others Nettle-rash and similar eruptions. Indeed, so marked is this effect on some constitutions, that it is necessary to forbid shell-fish altogether. Crustaceans—*Lobster*, *Crab*, *Crawfish*, *Prawn*, and *Shrimp*—have white, firm flesh, and are esteemed as delicacies; but, being difficult of digestion, are not available for the feeble and dyspeptic. Mollusks: *Oyster*, *Mussel*, etc., are not suitable for invalids, except the Oyster; the Mussel, for some unknown reason, being to some persons, under some circumstances, injurious and poisonous. Oysters, however, are very nutritious. They should be taken raw, and masticated like other food. The hard, muscular attachment to the shells should not be eaten.

Condiments.—The use of flavouring or seasoning elements is to stimulate the failing appetite, to give zest to the food, to correct injurious properties in the food, or to facilitate digestion by causing an increased flow of gastric secre-

tions, augmenting their energy, and increasing the muscular activity of the alimentary canal. Condiments are not food, but they often play an important part in the eating and assimilation of food.

5.—On Cooking Animal Food.

Cooking subserves several very important purposes, and therefore demands more intelligent consideration than is usually given to it. Uneducated persons do not understand the reasons for certain preparations and processes, and only act according to custom and the traditions of the kitchen and the sick-room. Hence, good food is spoiled and wasted, and both the healthy and diseased are disappointed of the anticipated flavour and nourishment. Cooking removes some things that might prove injurious, destroying any parasitic germs that may exist. It renders food more pleasant to the eye, agreeable to the palate, and digestible by the stomach. It softens connective tissue, relaxes muscular fibre, coagulates albumen, and solidifies fibrine, thus making the whole substance less cohesive and more easily masticated, dissolved, and assimilated. Previous beating and bruising facilitates the process, and makes the flesh more tender; hence the common custom of beating steaks. The warmth of the food also aids digestion.

In cooking animal food, the following processes are in ordinary use: Boiling, Roasting, Broiling, Baking, Frying, Stewing. Speaking generally, about one-fourth of the weight is lost by the process; but the loss varies with the quality of the meat and the process employed. Dr. Letheby estimated the loss at the following percentages:—

	Boiling.	Baking.	Roasting.
Beef, generally	20	29	31
Mutton, generally	20	31	35
,, Legs	20	32	33
,, Shoulders	24	32	34
,, Loins	30	33	36
,, Necks	25	32	34
Average	23	31	34

The loss arises principally from evaporation of water, the escape of fat and nutritive juice, and the destructive action of heat. According to Dr. Letheby it is least in boiling, greatest in roasting, because in the former process there is no evaporation of water. This suggests that in the baking and roasting endeavour should be made to prevent evaporation. Indeed, the perfection of cooking is to retain as much as possible of the constituent elements of the meat, and this is accomplished in the different methods adopted by subjecting the meat at first to a strong, quick heat, which contracts the fibres, coagulates the albumen at the surface, and thus closes up the pores by which the nutritious juices would escape. A lower and less rapidly acting heat will then suffice; for, thereafter, the cooking goes on through the agency of the natural moisture of the flesh. Converted into vapour by the heat, a kind of steaming takes place, so that whether in the oven, on the spit, or in the midst of boiling water, the meat is in reality cooked by its own steam. When properly prepared, instead of being dried up or insipid, the meat will be full of its own juice, which will flow forth as rich gravy at the first cut.

Boiling.—For this process a large joint is preferable. It should be put suddenly into *boiling* water, and remain at boiling temperature for five or ten minutes. By the contraction and coagulation thus caused, the internal juice is prevented either from escaping into the water by which it is surrounded, or from being diluted and weakened by its entrance through the pores. The boiling may then cease, and the remainder of the process may go on most effectually at a temperature of 160° to 170°; indeed, the common mistake is to shrink and harden the muscular fibre by the maintenance of excessive heat.

Roasting, to retain the nutritive juices, should take place quickly, and before a fierce fire at first; a lower heat, at a further distance from the fire, will then suffice.

Broiling should be done in the same way. A beef steak or mutton chop should be done quickly over a hot fire, that the natural juices may be retained.

Baking is but a method of roasting, but with this difference,

that it takes place in a chamber from which there is usually no escape for the volatile fatty acids which are generated. They, therefore, impregnate the meat and render it richer and stronger, and less adapted for weak digestion.

Frying is, for the same reason, objectionable; because the fatty matter in which the meat is cooked produces an excess of the volatile acids; moreover, the fat is often burnt, and thus changed in its character, and rendered unsuitable for invalids.

Stewing is the best process for digestion. The meat should be just covered with cold water, then heated up and kept simmering, not boiling, till thoroughly done. The nutritive materials are diffused through the solid and liquid, which are then served up together. *Hashing* is the same process with meat previously cooked. But hashed or otherwise twice-cooked meat is not as wholesome as when fresh cooked.

There is another method of cooking, by which the meat is stewed in its own vapour alone. The meat is placed in a covered jar, the jar is put into water in a saucepan, and the water is made to simmer, and when a sufficient time has elapsed the meat is done, quite tender, and well adapted to the invalid. Warren's Cooking Pot, and the "Norway Nest," are constructed to prepare meat in this way.

Soups, Broths, etc.—If, however, it is desirable to extract the nutriment so that it may be given in a liquid form, the meat should be finely chopped or minced, put into cold water, and after maceration for a short time, gradually heated to a simmering temperature, at which it should be kept for half an hour if *broth* be required. But if *soup* be wanted the heating should go on to boiling point, and be maintained there, in order that the gelatine may be extracted to solidify the soup. Bones, which require long boiling, yield abundant gelatine. It should be carefully observed that the minced meat should be put into cold water, never into boiling water at first.

It is a cause of regret to find how extensively the principles we have expressed in this section are disregarded. Even in some well-informed circles there exists lamentable ignorance or extreme carelessness as to the proper method of

cooking animal food so as to utilise its most valuable constituents.

6.—Non-intoxicating Beverages.

We should preface this subject with the remark that, experiments, carried out in France by Dr. Lallemand, show that tea and coffee, by their stimulating yet non-intoxicating qualities, are valuable auxiliaries in the crusade against alcohol. A few sips of good tea or coffee, taken whenever a craving for stimulants comes on, have proved sufficient to extinguish it for a time, and, by perseverance in the practice, drunkenness has at length been entirely overcome.

Uses of Tea.

TEA.—Owing to its stimulating and restorative action on the nervous system, tea is very serviceable to travellers and soldiers; and should be preferred to alcoholic stimulants after fatigue. It is equally efficacious against heat and cold; in nervous exhaustion, particularly in hot climates, it has often proved strikingly beneficial. It increases cheerfulness and activity, clears and quickens the brain, stimulates the energies, and lessens the disposition to sleep. By its warmth it warms the body when cold, by promoting the action of the skin it cools it when hot, and if taken cold, by its astringency it modifies the action of the bowels. Hot tea should not be taken when there are traces of diarrhœa; a cup of warm or hot tea accelerates the action of natural aperient waters.

Tea injurious.

As commonly prepared, tea is often the cause of much Dyspepsia, particularly when drunk in excessive quantities, or too frequently—that is, as a rule, more than once a day. In some nervous and gastric disorders, tea, and other hot beverages, are better discontinued, at least for a time. In this way we have often cured very intractable cases. Dyspeptics, suffering from flatulent indigestion, should take it in very moderate quantities only; as an excess of fluid increases the gaseous distention of the abdomen. Dispensary patients, especially poor women, often drink tea at every meal, and much ill-health is the consequence. When tea causes loss of appetite, palpitation of the heart, mental excitement, or sleeplessness,

obviously its use should be relinquished. Tea should never be given to children, even although largely diluted. The common practice of adding a small quantity to milk-and-water begets a relish for it, leading to its use at an age when the nervous and muscular systems require no such aid.

Tea taken with animal food—"tea-dinners," or "meat-teas," as they are called—is more liable to produce indigestion than when the meal consists chiefly of bread-and-butter. Two or three hours after dinner, when digestion has proceeded too far to be much interfered with, the habit of taking one or two small cups of tea is usually unobjectionable; but tea is always better avoided at bed-time.

Preparation of Tea. Three principles are extracted from tea by infusion: one, aromatic (*oil*), another, nitrogenous (*thein*), the other, astringent and bitter (*tannin*). The last, the cause of gastric disorder, is only given off after prolonged saturation; whereas the aromatic oil and thein are completely extracted in about two minutes. Hence to make tea, especially for the dyspeptic, it should only be infused two minutes, and then poured off into a heated teapot, so as to separate it from the leaves. Thus prepared, tea is not so likely to cause flatulence; but it is less economic than the ordinary method, much more tea being required. Soft water makes the best tea, but soda should not be used, for it only extracts the astringent tannin. The water should only boil once, immediately before using it, and not for hours, as is sometimes the case; the teapot should be quite *dry*, as well as hot, when the leaves are put into it, and the infusion, as before stated, not allowed to exceed two minutes.

Teapots that retain the heat are better than those that allow it to pass off readily; hence black earthenware teapots should not be used; white glazed earthenware, or porcelain, are suitable; but brightly polished silver teapots are the best, for they radiate much less heat than any other material.

Addition of Lemon. The use of sugar in tea, except in small quantity, should be given up by persons who have a tendency to become corpulent. According to our taste, the flavour of tea is improved by substituting lemon for

cream or milk: pouring the hot tea over a slice of lemon cut with the rind upon it. Besides being more palatable, the lemon-juice more effectually allays thirst, and is especially valuable at those seasons of the year when fruits and fresh vegetables are not generally to be obtained.

Choice of Tea. Few persons know how to select tea, but generally trust to the grocer or tea-merchant for what they require, cheapness being their chief desideratum; whereas an experienced housekeeper should be able by sight and handling to judge of its condition and quality, just as a corn-miller is in the case of wheat. Pure tea yields a pleasant aroma, both in a dry state and after infusion; the flavour of the infusion should also be agreeable, and its colour not too dark. Tea-merchants chiefly depend upon the smell and taste of the infusion. In selecting tea, that which is too much broken up should be rejected; good tea should present a mixture of large, thick, dark, and old leaves; while in the best kinds some remains of the flowers may be found.

Price of Tea. Some dealers advertise tea of the best and highest quality at from two shillings to three shillings per pound; whereas, the best tea cannot be purchased under prices varying from three shillings and eight pence to six shillings the pound, according to the variety.*

Admixture of Tea. To produce a tea of the nicest possible flavour, the following kinds and quantities can be recommended:

1lb.	plain, unmixed	Souchong at 4s.
1lb.	,,	Congou at 3s. 8d.
½lb.	,,	Assam at 4s. 4d.
2oz.	,,	Orange Pekoe at 6s.

These should be purchased separately, each sort being only of the description named, and the whole mixed in a large canister for use.

Varieties of Tea. *Congou* is a large, rough-looking tea, with a strong aroma: its leaves after infusion resemble a small black-currant leaf in shape.

Souchong is of a brighter colour than Congou, the leaf being

* Since the above was written, the "duty" on tea has been very considerably reduced.

longer and narrower, and the infusion much more finely-flavoured.

Assam is a thin, poor-looking tea, resembling in appearance small, thin sticks; this description does not apply to that known as the "flowery Assam," which has the appearance of a dried flower. Very little of the latter is imported into England, but it is largely used in Russia, where it is considered false economy to purchase cheap tea.

Orange Pekoe is used only in small quantities for flavouring, and can easily be known by its aromatic perfume.

The various blends of "Ceylon Teas" have within the last few years become popular. A short time ago a sample of Ceylon tea offered at public auction realized the enormous price of £22 10*s*. per lb.

Coffee.—*Uses of Coffee.*—Coffee is a valuable beverage, especially for soldiers; it is invigorating without producing subsequent collapse, and the hot infusion is almost equally useful as an antidote to heat and cold; in the one case by the warmth of the infusion, in the other by its action on the skin, while in both cases it acts beneficially by stimulating the nervous system. (*See Parkes, Practical Hygiene.*) In fatigue, privation, and indeed under ordinary circumstances, coffee is preferable to alcoholic beverages. It economises other nourishment by lessening waste. It is often serviceable in the headache of nervousness and exhaustion. A strong infusion helps to keep awake persons poisoned by *opium;* and to allay the effects of the immoderate use of alcohol.

Coffee Injurious.—In some persons coffee produces sleeplessness, deranged vision, mental excitement, palpitation, and indigestion, and by such should not, therefore, be taken as a beverage. It is also somewhat laxative. It is more heating and stimulating than tea, and raises the pulse; but it is heavier and more oppressive to the stomach.

Preparation.—A most important point in making good coffee is to use a *sufficient quantity* of the powder. The minimum that should be allowed is $1\frac{1}{4}$ oz. to a pint of water. The *café noir* of the French contains a larger proportion than this. *Café au lait* consists of a decoction of strong coffee, to which an equal quantity of hot milk is added. It is especially necessary

to remember that the full qualities of coffee are not obtained if water is used at a temperature lower than that of the boiling point. It even bears boiling, which tea does not. The particles of ground coffee are often found suspended in the liquid, and isinglass or white-of-egg is sometimes used to refine it. Nothing, however, is required beyond pouring a cupful out and returning it to the pot to effect the necessary clearing.

Or, a coffee-pot may be obtained larger in circumference but not so high as they are usually made; a flannel bag three inches deep should be sewn on to a wire running round the rim; and the bag should be kept from the spout by means of two straight pieces of wire soldered inside, from the rim to the bottom, in front of the spout. The coffee is placed in this bag, the required quantity of boiling water is poured gradually upon it, and allowed to run through.

The addition of boiling milk, in the proportion of one-fourth, adds greatly to the flavour and virtue of the coffee. Lastly, when coffee is taken daily, an enamelled saucepan should be used for this purpose exclusively.

Choice, etc.—After securing a proper quality of coffee beans, the next very important object is to know that the process of *roasting*, on which the flavour and agreeableness of coffee very much depend, has been properly done. If roasted too little, the oil and empyreumatic constituents are not developed; or, on the other hand, if done too much, they may be destroyed. Dr. E. Lankester stated that coffee beans, when roasted, may have three degrees of shade—reddish-brown, chestnut-brown, and dark-brown; and when a full-flavoured coffee is preferred, probably the darkest is the best. After roasting, coffee should not be kept long before it is ground. This is usually done in a coffee-mill; or it is pounded in a mortar. In either case, the mill or mortar should be used for no other purpose, as coffee has a marked tendency to absorb other odours, and thus to acquire a flavour not its own.

Lastly, when ground it should be used as soon as possible, for in this state it rapidly gives off its volatile oil. The best method for keeping it for a short time is in a clean, accurately stoppered bottle. Lead or tin-foil covering does not so effectually retain the virtues of the ground coffee.

Cocoa.—The composition of cocoa is widely different from that of tea and coffee, although the theobromine is similar to thein and caffein. The fatty constituent is large, varying from 45 to 49 per cent.; the theobromine is 1·2 to 1·5 per cent.; the protein substances 13 to 18 per cent. The ash contains a large quantity of phosphate of potash (*Parkes, Practical Hygiene*).

Uses of Cocoa.—The large amount of fat and albuminoid substance renders it a most valuable article of diet, alike for strengthening the frame in conditions of debility, and sustaining it under prolonged or excessive exertion. During nursing it is most useful, tending, probably more than any other beverage, to maintain an excellent supply of maternal milk. The combination of nourishing properties which cocoa contains has led to its being compared to milk. Humboldt states that cocoa and maize cakes are used by travellers in South Africa, and that the large amount of agreeable nourishment in small bulk enables them to carry easily several days' supplies.

Preparation.—To produce from cocoa-nibs one of the most wholesome and nutritious of beverages, the following method is recommended: For two persons, take of Fry's No. 1 nibs a small teacupful, and soak in one quart of water overnight; next morning boil briskly for two hours, then strain off, and use directly with boiling milk. It should not be re-warmed, as it then loses its flavour, just as tea does when warmed up again. The cocoa is best boiled in a block-tin three-pint wine-muller, over a small gas-stove; or, better still, in a new French milk-saucepan, which consists of white ware, fitted into an outside tin casing. The cocoa-nibs already soaked, as previously directed, should be put with a proper quantity of water into the white ware, the outside vessel being also filled with water and boiled for two hours. Cocoa thus prepared the author believes, from personal use, to be incomparably the best; but when, from various reasons, the above method cannot be adopted, the preparations of well-known manufacturers may be substituted, and as breakfast beverages are much superior to tea or coffee; for although they are mixed with sugar, arrowroot, and other kinds of farina, they are not adulterated in the sense of containing any deleterious ingredient.

7.—Water.

There is no beverage so wholesome, or, to the unperverted taste, so agreeable, as pure water, the natural drink of man, which may always be taken in moderation when thirst is present. Water is requisite in many functions of the animal economy; for example, it favours digestion by promoting the solution of our food, and acts as a vehicle to convey the more dense and less fluid substances from the stomach to their destination in the body. It gives fluidity to the blood, holding in suspension, or solution, the red globules, fibrin, albumen, and all the various substances which enter into the different structures; for the whole body is formed from the blood. Not only the soft parts of the body, but even the very bones, or the materials of which they are composed, have at one time flowed in the current of the blood. It enters into the composition of the tissues of the body, lubricates those tissues, and forms a necessary part of our bodily structure. It equalises the temperature of the body by evaporation, and regulates the chemical changes resulting from nutrition and decay. It is the vehicle for the removal of effete products from the body; increased water-drinking causes increased flow of urine, and thereby facilitates the excretion of solid particles. In this way some of the impurities which cause Gout, Gravel, etc., may be eliminated. To prove how essential water is for the development and maintenance of the animal body, we may here state that a calculation has been made which shows that a human body, weighing 154 lbs., contains 111 lbs. of water. Such a fact suggests the necessity for obtaining water pure, and taking it unpolluted by animal and mineral ingredients. Notwithstanding, where *strict chemical purity* and an *unlimited supply* of water cannot both be secured, the latter should be regarded as of the greater importance.

Rain-water, collected in suitable vessels in the open country, away from crowded dwellings and manufactories, where processes are constantly going on which tend to its deterioration, would be found to answer better for domestic purposes than the most sparkling water obtained from pump or well; indeed, so beneficial are its effects upon the skin, that an exclusive use

of rain-water for ablutions would greatly modify, if not altogether obviate, many skin diseases.

Spring-, river-, sea-, surface-, well-, and mineral-water, all contain various substances dissolved in them, which render them, without distillation or filtration, unsuitable for drinking, or even to be used in the preparation of articles of diet; for which purpose, as well as for bathing, the purer the water is the better. The purest water is obtained from deep wells, bored through the earth and clay down to the chalk (*Artesian Wells*).

It is most important that the receptacles for water—tanks and cisterns—should be carefully examined and thoroughly cleansed at regular seasons, especially after a time of drought and before the approach of winter. Much mischief is often done, and disease induced, by allowing cisterns to fill up after they have been dry, or the water in them low; the quantity of sediment and filth is frequently very great, and if not carefully removed becomes mingled with every fresh influx of water, and thus Diphtheria, Enteric fever, and other blood diseases may be set up. The deleterious consequences that ensue from neglect of this duty are often alarming, although the source of the evil be unsuspected.

It is a fallacy to suppose that surface well-water is purer than that obtained from deep wells, because it is more sparkling and often cooler and clearer. The sparkling of these waters is due to the presence of carbonic acid gas, and that acid is derived from the decomposition of animal and vegetable substances.

"The situation of these wells, especially in London, explains the origin of these impure matters. The water that supplies the surface wells of London is derived from the rain which falls upon the surface of the land, and which percolates through the gravel, and accumulates upon the clay. Now this gravel contains all the soakage of London filth; through it run the drains and sewers of London; and its whole surface is riddled with innumerable cesspools. Here is the source of the organic matter of surface well-waters, and also the cause of their coolness, their sparkling, and their popularity. In most small towns there is a public pump, and

when this is near the churchyard, it is said to be always popular. The character of the water is no doubt owing to the same causes as that of London surface-wells, the remains of humanity in the churchyard supply the nitrates and carbonic acid of the water.

"From this kind of impurity the waters of deep wells in London, and of wells cut into rocks which bring their water from a distance from towns, are entirely free. They frequently contain inorganic salts in abundance, but they do not contain organic matters; hence, for drinking purposes, they are far preferable to the waters of surface wells."—*Lankester.*

We shall rejoice if the foregoing observations, and others on subsequent pages, result in the removal of a foolish prejudice, which unhappily exists in the minds of many, against pure water, an element which God has provided with the most lavish abundance; and in promoting, both for internal and external purposes, in health and sickness, a more regular use of this invaluable boon. In a community in which this element shall be used as the chief beverage, and more abundantly for purposes of purification, we may hope to find the pure virtue, of which water is so vivid a type. There, too, suffering will be easily controlled by our remedies, and the development of latent tendencies to disease which the habits and fashions of the present age seem to favour, will be most effectually prevented.

8.—Air.

Sir Isaac Newton, it has been stated, made but one speech in Parliament; and that speech, so worthy of his philosophic mind, who had discovered some of the profoundest secrets of nature, was embodied in the request that *some one in the gallery would open the window.* A proper supply of pure fresh air is essential to the preservation of life and health, as well as to the maintenance of cheerfulness of spirits, and the consequent enjoyment of life. Although life may not be destroyed suddenly, nor even pain or uneasiness be felt at the time, still by breathing an impure atmosphere the vital energies are slowly but surely impaired; the evil being greatly

intensified in the case of growing children, and persons suffering from disease.

Pure Air. Pure air is found to contain 20·99 per cent. by volume of oxygen, and 0·33 of carbonic acid gas, the remaining 78·077 parts being made up of nitrogen, watery vapour, and traces of ammonia. The relative proportions of carbonic acid and the aqueous vapour vary in different localities, but those of the other constituents are but slightly altered. There are ·089 parts per cent. more oxygen in the air of the sea-coast of Scotland than in Manchester during frost and fog, while the amount of carbonic acid varies from ·03 to ·05 per cent. In the air of the loftiest mountains we find relatively more carbonic acid, less oxygen, and less organic matter than in flat districts, and in towns always a diminished proportion of oxygen. The temperature of a place mainly determines the amount of moisture, the air being "saturated" when it holds in suspension the maximum amount for the given temperature. The average proportion of aqueous vapour is 1·46 per cent., or from one-half to one-fourth less than the amount constituting saturation. A deviation from those limits renders the air too dry or too moist for comfort.

Impure Air. The impurities of the air may be ranked under two heads : gases, and matters held in suspension. The latter may be discovered everywhere by means of electric light, though our notice is attracted to them only when the direct rays of the sun fall upon them. From the soil are wafted into the air particles of every chemical substance it contains. Near the dwellings of men, particles of carbon, hairs, fibres of cotton and woollen fabrics, etc., abound. The vegetable world contributes seeds, spores, germs, pollen, and light floating bodies. From the animal kingdom there are also germs, and particles of worn-out tissues. The organic vapours arising from the decomposition of animal and vegetable products have hitherto baffled man's attempts to discover their precise chemical constituents ; a similar obscurity attaches also to the organic substances known as the specific virus of contagious diseases. These all deteriorate the air.

Air Spoiled by Breathing.

In the process of breathing, the air loses a third part of its oxygen, the life-sustaining principle, and receives in exchange carbonic acid gas, a gas not only incapable of supporting life, but actually destructive of it. Such is the change effected by a solitary act of breathing; and if this process goes on in an ill-ventilated room where several human beings are gathered together, the carbonic acid gas accumulates, usurps the place of the oxygen consumed, and so renders the air less and less fit for the purposes of the renewal of life. Experiments prove that if the air of a room contains ·7 of carbonic acid per 1,000 cubic feet, it even becomes offensive to the sense of smell. Carbonic acid gas cannot support combustion; hence a lighted candle partially or completely surrounded by it, burns slowly or goes out; and so it is with human beings. When more or less completely enveloped in an atmosphere charged with this gas, all the functions of the body are tardily and imperfectly performed—the muscular tissues are enfeebled, the breathing becomes oppressed, the head aches, and, in extreme cases, life is extinguished amidst sufferings of the most distressing nature. The fact can scarcely be too strongly stated that efficient ventilation cannot be secured unless sufficient space be made for the egress of the impure air from the upper part of a room, and provision in the lower part for the moderate but sufficient access of fresh air from the surrounding atmosphere. In the greater number of dwelling-houses no direct provision at all has been made for this purpose; on the contrary, the only ventilation obtained is due to the imperfect fittings of windows and doors, although made as impervious as possible to the outer air, while the floors are covered with carpets, and in the ceiling no apertures exist for the escape of carbonic acid gas. In this way all classes of the community suffer almost equally.

Airy Sleeping Rooms.

The fact that carbonic acid gas is inimical to health and life, shows the importance of making provision for its uninterrupted removal from our houses and places of assembly, and, above all, from our sitting-rooms and *sleeping-rooms*. *Airy, well-ventilated sleeping apartments should be ranked with the most important requirements of life, both in*

health and disease. Bedrooms, in which about one-third of human existence is passed, are generally too small, crowded, and badly ventilated. The doors, windows, and even chimneys are often closed, and every aperture carefully guarded so as to exclude fresh air. The consequence is, that, long before the morning dawns, the atmosphere of the whole apartment becomes highly injurious, from the consumption of its oxygen, the formation of carbonic acid, and the exhalations from the lungs and the relaxed skin. In an atmosphere thus loaded with effluvia, the sleep is heavy and unrefreshing, partaking more of the character of insensibility. There are certain diseases in which the cause of death is simply an accumulation of carbonic acid gas in the blood; and this condition exists, to some degree, in a badly-ventilated or overcrowded bedroom. Instances of speedy death from overcrowding can be easily recalled: 123 out of the 146 prisoners confined in the "Black Hole of Calcutta" did not live through the night; but that was not the whole of the mischief, for many of the survivors afterwards died from "putrid fever." During a rough night in 1848, when 150 passengers were confined in the cabin of the Irish steamer "Londonderry," with every aperture for the admission of fresh air closed, before morning 70 persons had expired. Time may be sometimes required to mature and develop the bad effects, but they are now acknowledged to be the most potent and extensive of all the predisposing causes of disease, and especially of Consumption. If provision were made for the admission of fresh air, and the escape of impure air, the sleep would be lighter, shorter, and more invigorating. In nearly every instance, the door of the bedroom may be left open, and the upper part of the window let down a few inches—a greater or less extent according to the state of the weather—with perfect safety, a current of air being prevented from playing on the face of the occupant, by placing the bed in a proper situation, or by suspending a single curtain from the ceiling. During thick fogs or severe winds, the apertures directly communicating with the external air may be closed, and ventilation secured from the adjoining landing.

The importance of the subject is very correctly and strik-

ingly put by a medical writer of the last century :—"If any person," he remarks, "will take the trouble to stand in the sun, and look at his own shadow on a white plastered wall, he will easily perceive that his whole body is a smoking mass of corruption, with a vapour exhaling from every part of it. This vapour is subtle, acrid, and offensive to the smell; if retained in the body it becomes morbid, but if re-absorbed, highly deleterious. If a number of persons, therefore, are long confined in any close place not properly ventilated, so as to inspire and swallow with their spittle the vapours of each other, they must soon feel its bad effects." Unpleasant as it is to dwell on such a subject, it is yet true that the exhalations from the human lungs and skin, if retained and undiluted with a continuous supply of oxygen (the active agent in *all* disinfectants), are the most repulsive and deadly with which we can come in contact, and are acknowledged by all physiologists to produce a kind of putrescence in the blood. We shun the approach of the dirty and the diseased; we hide from view matters which are offensive to the sight and the smell; we carefully eschew impurities in our food and drink; and even refuse the glass that has been raised to the lips of a friend. At the same time, "we resort to places of assembly, and draw into our mouths air loaded with effluvia from the lungs and skin and clothing of every individual in the promiscuous crowd: exhalations, offensive to a certain extent from the most healthy individuals, but which, rising from a living mass of skin and lung in a state of disease, and prevented by the walls and ceiling from escaping, are, when thus concentrated, in the highest degree deleterious and loathsome" (*Bernan*).

Happily there are many natural causes at work tending to remove these impurities: *e.g.*, the processes of vegetation, which absorb animal emanations, and the rain, which washes them down into the earth. From these operations of nature man learns many a useful lesson, and were it not for her ceaseless activity all his sanitary measures would prove useless.

The great practical inference is, that the only means of preventing persons from poisoning themselves and others is to

ensure their being constantly surrounded by fresh air; otherwise, low fevers may result, and such acute diseases as Scarlatina, Measles, Small-pox, etc., may be excited in epidemic forms, often marked by malignant symptoms. The air of an apartment containing several human beings, if unchanged, not only becomes charged with carbonic acid gas, but also, as before stated, impregnated with animal particles which fly off from the skin and lungs, so minute as scarcely to be detected by the microscope, but capable of decomposition; and which taken by the breath into the lungs, may be absorbed, and develop the worst forms of Scrofula and Consumption. But if these particles are given off from persons affected with, or recovering from, Small-pox, Scarlet-fever, Hooping-cough, Typhus, etc., they will exert a still more injurious influence upon the health, and probably generate in others diseases like those from which they emanated.

Ventilation of Schools.

The sanitary arrangements of many schools are notoriously bad. The buildings used for such purposes are often unsuitable, the cubic and the window space both of school-rooms and sleeping-rooms being totally inadequate. Loss of appetite, headaches, and general delicacy—effects often attributed to overwork, but in reality due to the want of fresh air—naturally result from this overcrowding and neglect of ventilation. Parents should always inspect the rooms, and ascertain their size, the position of the windows and fire-places, and other facilities for ventilation, with the average number of occupants. A rough test of the efficiency of the ventilation of a school-room may be arrived at by entering it after it has been occupied some two hours, and comparing the difference existing between the air of the room and that out of doors.

Badly-ventilated Churches, etc.

It is most important to bear in mind that the assembly in an ill-ventilated church,* court of law, school-room, theatre, ball-room, or evening party, may include in its number unsafe convalescents from contagious diseases. The best security we can suggest is, as

* "The wakefulness of congregations would be much promoted if the truth were more freely mixed with oxygen. Nothing, except dull sermons, makes men more sleepy than carbonic acid."—*W. White.*

far as possible, to avoid all places of public resort or private gatherings in which the most ample provision is not made for the admission of fresh air, and for the uninterrupted escape of air spoiled by carbonic acid gas or animal exhalations. But if compelled to enter a room whose atmosphere is poisoned by carbonic acid gas, the following fact is worthy of note. The air inhaled may be rendered harmless by applying to the mouth and nostrils a handkerchief dipped in a weak solution of lime or potash, or in water simply; thus oxygen only will be admitted into the lungs, and the carbonic acid gas excluded. In the Section on Small-pox it will be seen that in a recent epidemic the greatest success attended the treatment of patients absolutely in the open air in mild weather, and with the windows and doors constantly open, day and night, in the coldest months of the year. In the cure of general diseases, too, pure air exercises a very potent influence. Jackson, writing on the Peninsular war, states that more lives were destroyed by accumulating sick men in ill-ventilated apartments than in leaving them exposed to severe weather by the side of a hedge or common dyke; thus proving the priceless value of fresh air.

9.—Sunlight.

The importance of sunlight for physical development and preservation is not duly appreciated. Women and children, as well as men, in order to be healthy and well-developed, should spend a portion of each day where the solar rays can reach them directly; this being particularly necessary when there is a tendency to Scrofula. Just as sprouts of potatoes in dark cellars seek the light and are colourless till they come under its influence, and as vegetation goes on but imperfectly in places where sunlight does not freely enter, so children and adults who live almost entirely in dark kitchens, dingy alleys, and badly-lighted workshops, are pale-cheeked and feeble. Houses are only fit to be occupied at night when they have been purified by the solar rays during the day.

It has been pointed out by Dr. Ellis that women and chil-

dren in the huts and even the log cabins of America, which contain only one or two rooms, remain healthy and strong; but that after the settler has built a house, and *furnished it with blinds and curtains*, the women and children become pale-faced, bloodless, nervous, and sickly; the daughters begin to die from Consumption, and the wives suffer from the same, or from the diseases peculiar to women. At the same time, the adult males, who live chiefly out-of-doors, continue healthy.

The value of sunlight for animal development may be illustrated by such facts as the following. In decaying organic solutions, animalcules do not appear if light is excluded, but are readily organised when it is admitted. The tadpole, kept in the dark, does not pass on to development as a frog, but lives and dies a tadpole, and is incapable of propagating his species. In the deep and narrow valleys among the Alps, where the direct rays of the sun are but little felt, Cretinism, or a state of Idiocy, more or less complete, commonly accompanied by an enormous Goitre, prevails, and is often hereditary. Rickets, or deformities, crookedness, and enlargement of the bones, are very common among children who are kept in dark alleys, cellars, factories, and mines.

During the prevalence of certain epidemic diseases, the inhabitants who occupy houses on the side of the street upon which the sun shines directly are less subject to the prevailing disease than those who live on the shaded side. In all cities visited by the Cholera, the greatest number of deaths took place in narrow streets, and on the sides of those having a northern exposure, where the salutary beams of the sun were excluded. It is stated that the number of patients cured in the hospitals of St. Petersburg was four times greater in apartments well lighted than among those confined in dark rooms. This discovery led to a complete reform in lighting the hospitals of Russia, and with the best results.

Except in severe inflammatory diseases of the eyes or brain, the very common practice of *darkening the sick-room* is a highly prejudicial one. The restorative influence of daylight is thus excluded, and also the grateful and natural succession of light and darkness (the two always making up

the same period of twenty-four hours), which favours sleep at the appropriate time, and divests the period of sickness of the monotony and weariness of perpetual night.

10.—Healthy Dwellings.

To those who are able to choose their habitations, we offer a few suggestions. The subject is especially important to delicate families, and to persons predisposed to Consumption; it also deserves the attention of those who are healthy, and desire to maintain that condition unimpaired in themselves and their children. We advise, if possible, a country residence, and the selection of a house so constructed as to secure dryness of the foundation, walls, and roof. The site should be dry—a gentle slope, a gravel soil—and the aspect southerly or westerly; the bedrooms, especially those appropriated to cases of sickness, should have this aspect. It should also be a site *from* which there is thorough drainage, but *towards* which there is none. If the house is not upon a slope, the artifical *drainage* must be perfect.* In towns and crowded places in which the accumulation of decomposing and decomposed animal and vegetable matter is great, artificial channels or drains must be so constructed that all noxious matters and vapours may be rapidly removed and carried to a distance, before they can impregnate the atmosphere and water. Every dwelling, to be wholesome, should be accessible to the free passage of currents of air, and provided with an unlimited supply of good water. In the choice of a site for a house, a locality should be avoided which is in proximity to stagnant waters, or in which the water is impregnated with lead, iron, or other mineral substances; the ground should be above the level of the mist or vapour which rises after sunset in marshy and other districts. This subject is of special importance to the Colonist who may have to select a site for his habitation. In short, the fundamental condition of healthy dwelling-places is—perfect purity of air and water; this must take precedence of all other considerations. The cause of the spread and

* See "Causes" of Enteric Fever, Part III.

fatality of the mediæval plagues was neglect of the conditions necessary to secure pure air and cleanliness.

Other points of subordinate importance may be glanced at. The house should not be too closely surrounded by trees, or near to thick woods, as they both attract and retain moisture, while they exclude much sunlight, and prevent the free circulation of air; thus rendering the climate cold and damp. A cheerful situation, at the same time commanding the view of green trees, hedges, shrubs, etc., has a beneficial tendency. If compelled to live in a town, the house should face a park, square, or other open place, or, failing such advantage, be situate in a wide, airy street, with a favourable aspect. Lastly, a house should contain adequate bath arrangements, or at least provision for free personal ablutions.

It is true, many have not power to carry out these hints fully, but are compelled to live where their occupations, families, or means determine; nevertheless, even such may be benefited by these suggestions; for, although they cannot secure perfection in a house or its situation, they may aim at an approximation to it.

While making these suggestions upon the subject of dwelling-houses, we would notice the urgent necessity that exists for improving the homes of the poor, if we would see them raised in the social scale of moral beings, instead of degenerating into a mere brute existence. Much has already been done in the metropolis to provide healthy abodes for our working-men, but there is still much required, and the indecent overcrowding to be met with in some of our rural districts must, so long as it is suffered to exist, entirely defeat any efforts on the part of the clergy to ameliorate the moral and religious condition of the people.

11.—Exercise.

Exercise strengthens and invigorates every function of the body, and is essential to health and long life. No one in health should neglect to walk a moderate distance every day, and, if possible, in the country, where the pure and invigo-

rating air can be freely inhaled. *Walking*, besides being the most natural, is one of the healthiest modes of exercise, and other things being equal, will ensure the proper action of every organ of the body. The walk for health should be diversified, and if possible include ascents and descents, and varying scenery; and be alternated, when circumstances admit, with riding on horseback, active gardening, or similar pursuits; and with gymnastics and games of various kinds. Calisthenics are not only valuable means for curing deformities, but better still for preventing them. A gymnasium should be attached to every school, whether for boys or girls; the latter requiring such exercise possibly more than boys, in consequence of the delicate and fragile frames of growing girls, their sedentary habits, the strict discipline under which they are kept, and that common but ridiculous notion that to enjoy a holiday in a playful and unrestrained use of the muscles is unladylike and vulgar: whereas could such notions be corrected, and the course of action entirely reversed, spinal complaints would become less frequent, and all that lassitude and weakness so common among the young would be prevented. Much of the debility and deterioration of the race, now so common, is largely due to the neglect of regulated exercise in the growing young. Athletic sports and manly exercises should form a part of the education of youth; neither should these exercises be neglected in after-life, especially by persons of sedentary pursuits. We all know how soon an unwonted exercise of the muscles produces exhaustion, whereas after the muscles have been trained, we are astonished at the facility with which the same action is performed. Those who have given much attention to the subject, tell us of marvellous effects as to development and invigoration of the body resulting from a *judicious* course of gymnastic exercises; how the chest expands, how the muscles receive an accession of size and power, how the health and strength of the whole body are promoted by increased respiration and quickened circulation; how, in short, as the soldier expressed it, when asked whether he felt any stronger for a short course of training he had undergone at Warley Barracks, it makes a person feel "twice the man he did for anything a man can be set to do." Many

aches and pains would rapidly vanish if the circulation were quickened by a judicious and regular use of the muscles. These modes of exercise, practised moderately and regularly, and varied from day to day, are much more advantageous than the exciting, immoderate, and irregular exertions of the ball-room, the hunting-field, and even the cricket-ground, or the rowing-match, which are sometimes pursued so violently as to be followed by severe and permanent injury to the constitution. In the case of very feeble and infirm persons, carriage exercise, if it may be so called, and frictions, by means of bath sheets and gloves, over the surface of the body and extremities, are the best substitutes for active exertion.

The proper periods for exercise are when the system is not depressed by fasting or fatigue, or oppressed by the process of digestion. The robust may take exercise before breakfast; but delicate persons, who often become faint and languid during the early part of the day from exercise taken at this time, had better defer it till from one to three hours after breakfast. Exercise prevents disease by giving vigour and energy to the body and its various organs and members, thus enabling them to ward off or overcome the influence of the causes which tend to impair their integrity. It cures many diseases by equalising the circulation and the distribution of nervous energy, thus invigorating and strengthening weak organs, and removing local torpor and congestion.

Invalids should always be moderate in their exercise; should take only short walks, avoid fatigue, and not stand in the open-air. The best time for them is in the forenoon, arranged so as to allow half an hour's rest before dinner. They should never take exercise *immediately* before a meal or going to bed.

The philosophy of using the muscles is very correctly expressed in the following quotation from Dr. Chambers:—

"If an animal's limbs are duly employed, the muscles keep up their shape and their vigorous power of contraction; their flesh is of a rich bright-red colour when the animal is fully grown, and is firm and elastic. Examine it under a microscope, and you find it made up of even, parallel fibres, each fibre seeming to be engraved over with delicate equi-distant cross-markings, like a

measuring tape very minutely divided. The more the muscle has been used in a well-nourished frame, the more closely it conforms to the typical specimen of the physiologist:—

'Use is life; and he most truly lives
Who uses best.'

But suppose this muscular fibre has been unworked, then the flesh is quite different in aspect: it is flabby and elastic, of a pale yellowish hue, and makes greasy streaks on the knife that cuts it. Sometimes even all traces of fibres have disappeared, and it is converted into an unhealthy fat. Sometimes you may trace fibres under the microscope, but their outline is bulging and irregular, the cross-markings are wanted, and you see instead dark refracting globules of oily-matter in them. In short, the muscle is degenerating into fat, retaining in a great measure its shape, but losing its substance. Such is, by God's law, the penalty of not using His gifts."

Neglect of exercise in the open-air tells much more unfavourably on the health when associated with other unhealthy habits; habits of excessive bodily indulgence; habits of excess in food or of stimulants, and habits in general which tend to overcharge the system, to retard the activity of healthy change, and to overload the blood and tissues with the products of retrograde metamorphosis.

Out-of-door sport is a grand preserver of health. For a professional or business man "in city pent" to tramp "o'er moor and fell," his mind drawn from its daily round of care by the eagerness of the chase, has a powerfully renovating effect. It is not the three weeks' shooting or fishing that is most beneficial, but rather the weekly outing to which all who have the means should have the wisdom to treat themselves. The time lost is more than recovered by the additional vigour with which he prosecutes his labour during the remainder of the week. Even driving, by its mild excitement, and by taking the mind out of its usual groove, has a genial effect.

Those whose occupations are in general sedentary should avoid a very common mistake, that of over-taxing the muscular powers, by which the occasional holiday excursion produces debility instead of the intended healthy invigoration.

12.—Clothing.

The adoption of artificial clothing may be stated to serve three purposes,—the regulation of the temperature of the body; protection from friction, insects, and dirt; and ornament.

In this climate clothing is chiefly employed for warmth, which purpose it secures by moderating or restraining the escape of heat from the body. Articles of clothing have no power in themselves of generating heat, and are designated as warm or cool just in proportion as they restrain or favour its escape. Thus, a lady's muff and a marble floor are ordinarily of the same temperature; but the sensation produced by each is widely different, because the animal heat is retained by the muff, and rapidly carried off by the marble. Hence, for clothing we select those substances which least conduct heat, such as the wool of sheep and the silk produced by silkworms, which are superior, as non-conductors, to cotton or linen. In this country we have recourse chiefly to the former in winter, and to the latter in summer, cotton and linen garments being coolest, linen cooler than cotton.

There are several practical errors on the subject of clothing, committed perhaps by a majority of persons, to which we may briefly direct attention. "The first and most obvious of these," says Dr. Baikie, "is wearing too much clothing indoors or in bed, thereby both exhausting the natural powers of the skin, and exposing its action to a sudden check on going out into the cold air. This forms one of the principal objections to the almost universal use of flannel *worn next the skin*, and kept on even during the night, as is the practice with many persons. The skin is thus unnaturally excited, and in course of time loses its normal action; or, on the other hand, becomes so sensitive as to have its action checked on the slightest exposure." "I never use anything else," the same physician informs us, "than a light cotton shirt to sleep in, and strongly object to the common practice of *sleeping in flannel*."

Wearing Flannel next to the Skin.

The prevalence of this objectionable habit suggests the necessity for further caution. It is well known that, even in otherwise normal conditions, the skin of some persons is highly irritable and most unplea-

santly excited by contact with flannel, and that when this exalted sensibility exists, the use of flannel next to the skin may develop decided physical alteration. It does this mechanically by retaining the local heat and intensifying reaction. Cases of skin disease often come before us in which Pruritus is thus aggravated and the affection prolonged, especially when combined with neglect of proper ablutions. In congested conditions of the skin, or in morbid states of the cutaneous nerves, flannel is inadmissible; or if necessary to guard against vicissitudes of the weather, it should be worn outside a linen garment, as before suggested. The diseases in which this advice is especially applicable are, according to Dr. Tilbury Fox,—Erythemata, Roseola, Urticaria, certainly Syphilodermata in their early stages, Scabies, and Prurigo. "A remembrance of this little practical fact," says the above author, "will sometimes give us the greatest cause to be thankful that we attended to it, trifling though it be." Flannel, however, is of great value in our variable climate, and may be generally worn through the whole year as a great protection to health and life. Even in summer weather, flannel should not be cast aside, but a thin, light garment of that material substituted for a heavy one.

The *colour* of clothing is not unimportant, light colours being preferable for the following and other reasons:—(1) White clothing reflects the rays of heat which black absorbs; at the same time it impedes the transmission of heat from the body. Light-coloured clothes are therefore best both for winter and summer, retaining the heat in the former season and keeping it off in the latter. (2) Particles which emanate from diseased bodies, as in miasmatic districts, and unhealthy accumulations, are much more readily absorbed by dark than by light clothing. Therefore those who are exposed to contagious influences in the sick-room, or in unhealthy neighbourhoods, should wear light clothing. Dark clothes favour the transmission of contagious diseases from house to house much more readily than light. Dark clothing also imbibes odorous particles most readily, as,—the effluvia of the dissecting-room, the smell of tobacco, and even the peculiar odour of London smoke, which is at once detected in black clothing by country persons.

Frequent changing and cleansing of clothes is another point deserving attention. Those who adopt dark-coloured instead of light-coloured garments from motives of economy (dark clothes tolerating an amount of dirt inadmissible by light), should recollect that dark garments contract dirt after being worn a little time as much as light, and if not changed and cleansed may favour the production or spread of disease.

Thick, heavy clothing, the tissues of which are close and firm, is inconvenient. The textures of materials for clothing should be loose and porous, and contain air in their interstices—air being a bad conductor of heat.

"The advantage of having numerous light instead of fewer heavy coverings to the skin are these:—The stratum of air interposed between each layer of covering being a non-conductor, they are relatively much warmer than a much greater thickness in fewer pieces; 2ndly, they can be more easily laid aside to suit a changing temperature; 3rdly, being lighter they are less apt to overheat the wearer, and thus lessen the chance of a consequent chill."*

Other points may be briefly referred to. Summer clothes should not be put on too soon, or winter ones too late. Thin-soled or high-heeled boots† are destructive to health. So are *stays*. Only the anatomist knows the frightful misplacement of the internal organs of the body that is caused by the suicidal habit of tight-lacing. It gives rise, more or less, to that depression of spirits so common to young ladies; and worse still, occasionally irritates or aggravates organic disease of the most serious description. The muscles of the body were intended to sustain it erect; but when stays are applied, they soon become indispensable, by superseding the

* In China, one of the most changeable climates in the world, the variation in one day being frequently 35 or 40 degrees, this is the mode adopted by the natives to protect themselves:—A working man will often appear in the morning with fifteen or twenty light jackets on, one over the other, which he gradually strips off, as the day gets warm, resuming them again towards night.

† The evils of the *high-heeled boots* now so fashionable require a word of caution. They tend to change the long axis of the body directing the trunk backwards, and this altering the inclination of the pelvis is likely to influence unfavourably the process of gestation. Other injuries that have resulted are—troublesome corns, inflammation of the ligaments of the ankle-joint, and of their sheaths, and even dislocation of this joint.

action of the muscles; and, in accordance with a well-known law of the muscular system, when the muscles cease to be used they cease to grow, and become insufficient for the discharge of their natural functions. The back should be specially protected; cold there may soon affect the liver and bring on Bright's disease; or seize the lungs and cause Phthisis; or be instrumental in producing other thoracic affections.

Finally, it may be stated that the clothing of little children, whose feeble frames are less able to resist cold than those of adults, is generally insufficient. When a baby is divested of its long clothes, it is in danger of being imperfectly clad, the danger increasing when it can run alone, and is more exposed to atmospheric influences. It cannot be too strongly impressed upon those who have the charge of children, that the practice of leaving those parts exposed which when grown up we find it necessary to clothe warmly, especially the lower limbs and abdomen, is a frequent cause of retarded growth, mesenteric disease, Consumption, etc.

13.—Bathing.

Every person in health should bathe or sponge the whole body once a day with cold water, immediately following it by friction and exercise, to promote the reaction. Practised in accordance with the directions we have given, the bath is a potent aid to health, not surpassed in importance by any other hygienic habit recommended in this Text-book. Much of the vigour of the ancient Romans was due to the important place the bath occupied in the every-day employments of life amongst them; and, undoubtedly, as a nation we should be healthier in mind and body if the bath, so often recommended in this Text-book, were universally adopted amongst us. Merely washing the exposed parts of the skin is by no means sufficient; the entire surface of the body requires the application of water, with the use of pure soap, for the purpose of cleanliness, and as a means of invigorating the capillary circulation, and so fortifying the system as to

enable it to resist atmospheric vicissitudes. The secret of attaining these ends consists in employing the cold in such a manner and degree, and in the body being in such a state before and after the application, that the reaction or glow shall be most perfect. The cold sponge-bath may be adopted with safety by almost any one, the shock not being too great, and good friction rapidly causing agreeable warmth. The best time for a cold bath is on rising from bed, before the body has become chilled. If the weather and the water be very cold, the bath should be taken before a good fire. Very young children are benefited by rapid cold sponging or bathing, even during the winter months. Cold bathing should not be practised when the body is cold or cooling, nor when the skin feels chilly, until this feeling has been removed by friction or exercise; nor too soon after a meal, for then the circulation should be undisturbed, the stomach requiring all its power to digest the food; nor when the person is exhausted from exertion or fatigue; nor if the circulation is constitutionally too weak. The time spent in the bath should be regulated by circumstances, as the temperature of the room, the strength of the bather, etc., and may vary from one to four minutes; but if too prolonged, instead of tonic effects, depression will follow and possibly continue throughout the day.

Temperature.—The water of the bath should not be colder than 59°, ranging from this to 64°, according to the season, and the temperature of the room. The latter should be 64° or 65°; if lower than this, the water should be a little warmer, and if the room is *cold*, then the water should be 68°, and the bathing process performed as quickly as possible. The temperature of the bath-room is a point of considerable importance, and as it can only be accurately measured by a thermometer, one of these useful instruments should be kept in every bath-room.

If the important conditions stated above are disregarded, the immediate depressing effects of the bath will be continued; there will be no glow of reaction, but chilliness and dulness will ensue. An occasional addition of sea-salt to the water, as recommended in the next paragraph, will prove favourable to

reaction. A similar effect is likely to result from the force or shock with which the water is applied; probably, therefore, a shower-bath is the most efficient, from its exciting those forcible and deep inspirations which are the most efficient cause of subsequent reaction. Reaction is further promoted by vigorous friction over the entire surface by means of bath-sheets, which operates both by stimulating the cutaneous vessels, and also by promoting the more energetic action of the heart through the muscular exertion. A brisk walk after the bath also tends to perfect reaction.

Salt Water Baths. Those who are unable to secure sea-bathing may enjoy, to a certain extent, its advantages, by adding a solution of *Sea-salt* (the residuum of evaporated sea-water) to the water of the bath. If this be added in proper quantity, so that the mineral ingredient approximates to that contained in sea-water, the bath will be very much more efficacious than if simple fresh water be employed, because a stimulating action is imparted to the skin by the saline matter which the water holds in solution. The addition of salt obviates the chill which fresh water sometimes gives, and it will often be found that consumptive patients, with feeble circulation, and cold hands and feet, who could not bear the shock of fresh water, are much benefited by such a salt-water bath. In the absence of sea-salt, a handful of bay-salt or of common salt may be substituted.

Such a bath taken regularly in the morning, is conducive to health in three ways:—It inures the body to a degree of cold greater than it is likely to be exposed to during the rest of the day, and so protects it from the influence of atmospheric changes; it tends to remove irregularities in the circulation; and, by exciting the healthy action of the skin, it aids that organ in eliminating disease.

It is not every one, however, who can with safety practise bathing in the manner just now pointed out. Cold bathing would be very hazardous to patients who are extremely weak, or who have any organic disease, especially of the heart or lungs; there may also be some idiosyncrasy or condition of the constitution peculiar to the individual which would render such a course the reverse of beneficial. Caution

is more particularly necessary in infancy and old age. The adaptation of the cold bath to individual cases may often be determined by the following criterion :—If, after a bath, the person remains chilly, languid, and dejected, or suffers headache, it had better be discontinued for a while, and subsequently gradually adopted; but if the sense of cold rapidly passes off, and a glow of warmth and animation of spirits succeed and continue for some time, the cold bath is sure to be productive of good.

The *warm bath* is a great luxury, and is often productive of great benefit to the feeble and exhausted frame. The temperature may be varied according to the sensations of the patient, but as a rule it should be that of the blood—96° to 98°; if higher than 98°, the bath is likely to be followed by profuse perspiration, weakening to the whole system. Warm bathing, however, including the hot-air or Turkish bath, except as a remedial agent, and prescribed after a carefully-formed opinion, is generally prejudicial.

Sea-bathing, which should not be indiscriminately practised, is of the greatest value to convalescents from acute diseases, when debility is not excessive; to those whose health has been injured by over-work, by town residence with sedentary occupation, or by excesses of various kinds; and to persons suffering from many chronic illnesses. The propriety of it depends on the health of the bather, the temperature of the water, and the motion of the sea. Persons in feeble health should only plunge into the sea, remain a minute or two, and then leave it. Prolonged cold bathing has been known to occasion temporary albuminuria; and, if often repeated, may lead to structural changes in the kidney. (See under "Bright's Disease," Part III.) Persons in robust health may remain for five or six minutes; or, if they can swim and are accustomed to bathe, as long as they feel warm. If the water is very cold or the sea is strong, less time should be allowed. Stout, plethoric persons, liable to rushes of blood, palpitation, giddiness, etc., should bathe very cautiously. Aged persons should regard themselves in this matter as invalids. Infants, and feeble, timid children, are scarcely strong enough for the open sea. Injury is done to the feeble

by a disregard of their imperfect reactionary power, and to the timid by a disregard of the strain upon their nervous system. Delicate persons should choose a smooth sea. Strong persons may bathe before breakfast; others only in the forenoon. Sea-bathing is prejudicial when the body is exhausted, or overheated, or cold, or rapidly cooling. A short walk, without fatigue, should precede the bath; a longer walk, also without fatigue, should follow it. A warm glow and exhilaration of spirits after the bath indicate its beneficial action; and, on the contrary, chilliness and depression are indications of harm.

The temperature of baths may be thus classified—cold, 33° to 60°; cool, 60° to 75°; temperate, 75° to 85°; tepid, 85° to 92°; warm, 92° to 98°; hot, 98° to 112°.

For various forms of baths, and their adaptation to persons in disease, see page 122 *et seq.*

14.—The Influence of Professions and Occupations on Health.

Whatever may be the particular employment of an individual, it can rarely be divested of certain effects more or less prejudicial to health. Statistical tables afford abundant evidence that those occupations which permit the free use of pure air and moderate muscular exercise, with exemption from want or anxiety, are most conducive to long life. The following table from Tarbell's "Sources of Health," published at Berlin, although on too limited a scale for general application, undoubtedly approximates to the truth.

Of 100	Clergymen	42	attained the age of 70 years and upwards.
,,	Farmers	40	,, ,,
,,	Commercial Men	35	,, ,,
,,	Military Men	33	,, ,,
,,	Lawyers	29	,, ,,
,,	Artists	28	,, ,,
,,	Teachers	27	,, ,,
,,	Physicians	24	,, ,,

The first half in the above list, with the exception of the clergymen, are necessarily much exposed to the air, and take

physical exercise; but the other half, with the exception of the physicians, are chiefly confined in-doors, engaged in sedentary occupations. The difference between the longevity of the clergyman and the physician may no doubt be accounted for by the fact that, while the literary pursuits of the former are not so multifarious and unremitting as to prevent sufficient out-of-door exercise being taken, the nature of his studies may be regarded as favourable to a long life, by inspiring influences conducive to hopefulness and serenity. The physician, on the other hand, is exposed to influences the most adverse to health; he has frequently to encounter the poison of infectious disease, and is often unable to observe those rules and precautions which it is his duty to enforce upon others; his responsibility often involves extreme mental anxiety; these and his almost incessant occupation both of mind and body no doubt account for his comparatively short life. There are, however, instances of medical men attaining an advanced age. Harvey reached the age of 81; Hoffman, 83; Hahnemann, 88; Heberden, 93; and Hippocrates, 109. The last, it is said, was much engaged in travelling, and passed more of his time in the country than in crowded cities.

Why Employments are Unhealthy.

The chief circumstances which render occupations unhealthy are,—deficiency of daylight and pure air; a bad posture of the body during employment; and the inhalation of poisonous substances, or dust, which produces mechanical irritation of the lungs. The removal of various trades from dirty houses to commodious, clean, airy, and light factories, under the provisions of the various Factory Acts, has effected great sanitary improvement.

Abundance of sunlight is of great importance in workshops and offices, particularly where the young are employed. As already pointed out, patients make better and more rapid recoveries in well-lighted hospitals; and very serious cases are generally placed in the sunny side of such buildings. If, therefore, persons are more likely to regain health in such apartments, we may fairly conclude that health will be better preserved in a large, well-lighted workshop or office. Hence,

windows should be frequently cleaned, and the walls and ceilings whitewashed at least twice a year.

There is at present a general and just outcry against defective drainage; it would be well if the expression of public feeling were extended to the overcrowded state of our dwelling-houses and work-rooms, for the diseases and mortality from this source are much greater than those from other causes. Spacious, airy, and well-lighted offices and work-rooms for clerks, compositors, tailors, dressmakers, and others, would prevent a large amount of chronic disease; at the same time, work would be better done, and skilled labour rendered far more productive and valuable. The chief diseases from which sempstresses suffer are mainly occasioned by irregular and hasty meals, too little open-air recreation, and by the breathing of vitiated air in overcrowded work-rooms.

The influence of *posture* is not unimportant. The sedentary occupations followed by book-keepers, milliners, sempstresses, tailors, shoemakers, and others, are most unfavourable to health, for the sitting posture being generally combined with an inclination forwards, the chest and stomach are thereby injuriously compressed. To a limited extent, the hurtful consequences of such postures may be avoided by occasionally standing when at work, and by taking out-of-door exercise during the hours of relaxation. Abundance of healthful recreation in the open-air is the best corrective.

15.—Sanitary Hints for Europeans in India, Africa, South America, and other Tropical Climates.

1. Unnecessary exposure to the sun, rain, night-dews, and fogs should be strictly avoided, and especially should the head be protected against the sun. After exposure to the sun, the head, face, and if possible the whole person, should be bathed. If wet, the clothing should be changed as soon as possible, and the general surface rubbed with a coarse towel. In the case of exposure to dews or fogs, a cup of hot coffee or soup,

or a little *Quinine-wine*, or a dose of *China*, *Arsenicum*, or *Camphor*, should be taken as soon as possible. Indeed, *Quinine* is recommended as a daily article of diet, its efficacy against malarial fever being attested by the yearly reports from the Mauritius. But when the effects of exposure are cerebral, *Glonoine* is an invaluable remedy.

2. Stagnant water, or such as contains "bush" plants, living or dead, should be avoided, and only filtered or otherwise purified water used. Cold tea is the best beverage while at work, or on a journey. The mouth should be rinsed before swallowing the first draught, and only two or three mouthfuls taken at a time. This will relieve thirst as effectually as a larger draught.

3. All spirits, or other drink offered by the natives, should be declined, for they are all pernicious to Europeans, and may be absolutely poisonous. In these climates, intemperance is an intensified evil, leading to a speedy loss of strength, and rendering recovery from disease or injuries very doubtful.

4. Food should be good, moderate in quantity, and taken at regular intervals. The importance of a soldier not marching upon an empty stomach, led the authorities to order that each man serving against the Ashantees (February, 1874), should be supplied with tea or cocoa and a little biscuit every morning before the march. An experienced soldier eats as little as possible whilst on the march. In the "bush" it is necessary to beware of unknown fruit; some kinds, tempting in appearance, are in reality poisonous.

5. Cleanliness of person and clothing is very requisite; the linen should be changed as often as possible, and either washed or hung up in the sun, and well shaken. In the case of soldiers, after the day's march the *feet* should be bathed, and the socks washed if soiled. Common soap rubbed upon the socks, or oil, or fat of any kind, applied to the feet, tends to prevent their chafing. Blisters on the feet should only be opened at the close of the march, when, if a needle and thread be drawn through, the fluid will gradually ooze out. Powdered charcoal should be used daily as a dentifrice.

6. A respirator, or veil of thin linen, cotton, gauze, or vegetable fibre, worn over the face, may act as a safeguard

against malaria in the "bush;" so also keeping the mouth closed and breathing through the nose may protect the lungs from malaria or other poisonous emanations. For under-clothing, flannel is preferable to linen or cotton, experience at Rome and on the West Coast of Africa having proved it to be more protective against malaria.

7. Tobacco, especially if used in excess, is highly injurious; the prevalence of damp malarious fog is better antidoted by an occasional dose of *Camphor* than by smoking. To guard against mosquitoes and other insects, a little lime-juice should be applied to the hands and face, or *Carbolic Acid* and *Sweet-oil*, in the proportion of one to twenty. *Carbolic Acid* is especially offensive to the insect tribe.

8. It is never safe to lie down upon the bare ground, or in thick grass; in the one case there is danger of fever and Dysentery, and in the other of snakes, scorpions, etc. Remaining in the neighbourhood of newly-turned-up soil is also dangerous. If camping out for the night, a *raised sleeping-place* should be constructed, if only a few inches from the ground, as a precaution against dangerous exhalations; to keep off the attacks of insects, to prevent night-chills, and to purify the air, camp-fires should be lighted.

9. A man should never consider himself proof against climate, however great may be his strength. The risks and severity of illness may be lessened by due care and precautions; but the attempt to *brave* those risks will surely and speedily end in hopeless prostration. A melancholy illustration of the importance of this precaution occurred in the death of Lord Elcho (eldest son of the Earl of Wemyss), a lieutenant in the Coldstream Guards, having volunteered to accompany Sir Garnet Wolseley as aide-de-camp in the war on the Gold Coast, engaged with enthusiasm in the most laborious and hazardous enterprises, his zeal rendering him indifferent to the dangers of a pestiferous climate. Undaunted by the first symptoms of sickness, he continued his duties till an attack of Dysentery compelled him to desist. This was speedily followed by fever, and he quickly succumbed to the disease.

On being attacked with illness, the sooner treatment is

commenced, the greater the chance of recovery. Headache, pain, or a sense of coldness in the loins, and distaste for food, indicate a probable attack of fever. Gnawing pain, coldness in the stomach, and repeated evacuations, tell of approaching Dysentery. When the body is heated chill is most dangerous, and should be guarded against.

CHAPTER II.

Signs and Symptoms of Disease.

To recognise fully the various evidences of an unhealthy action of the system, a long course of study, including both healthy and morbid anatomy, is necessary. If, however, the several points referred to in this chapter be carefully examined, with reference to the different cases under notice, they will aid the student in arriving at a tolerably accurate idea of the nature and severity of the diseases he may be called upon to treat. The following are common and well-known diagnostic signs.

16.—Temperature and the Clinical Thermometer.*

During recent years, considerable help has been derived in the diagnosis and treatment of disease from the use of the clinical thermometer. In all cases of illness, to count the pulse and the respirations is not more important than to measure the heat. The thermometer aids the physician in arriving at definite conclusions, it relieves him of much mental anxiety, and in many cases gives him a clue to the disease even before any other characteristic symptoms have made their appearance. In temperate regions the normal heat of the human body, at sheltered parts of its surface, is

* The use of this instrument is partly attributable to a work from the pen of an eminent professor (*De Haen's*), published, more than a century ago, in Vienna, 1759–65. Like Hahnemann, he was far in advance of his age. *Dr. Aitken's Science and Practice of Medicine* is the authority on which we have much relied in the following statements.

98·4° Fahr.;* but this is not uniform, for there is a varying range of temperature during the twenty-four hours; the variations being greater, and occurring in general earlier, with children than with adults. The normal temperature is *raised* by active exercise, by warmer atmosphere, and therefore by residence in hot climates (about 1°), and temporarily by hot baths. It is *lowered* by exposure to cold without exercise, by severe mental exertion, and temporarily by cold baths or a full meal. In health, the temperature reaches its minimum usually about midnight, rising again in the morning and attaining its maximum during the day. This daily range undergoes a remarkable change in febrile conditions, when the maximum is reached in the evening. The maintenance of a *normal* temperature with reference to the period in the twenty-four hours at which it is taken, gives complete assurance of the absence of anything beyond local and trifling disturbances; for any acute disease always unnaturally elevates the temperature or animal heat.

Thus the thermometer enables us to diagnose decisively between an inflammatory and a non-inflammatory disease; and by its elevation also helps us to determine the severity of the inflammation. *Hysteria*, it is well known, often simulates inflammatory disease; but the temperature of hysterical persons is *natural*, whereas that of persons really suffering from inflammation is *invariably raised*. A case is recorded of a girl, supposed to be suffering from Hysteria, but simulating inflammation of the membranes of the brain. The hysterical tendency of the patient induced the belief that there was only *apparent* inflammation; the thermometer determined its genuineness, for it showed a temperature of 105·5°, proving the existence of grave inflammation, a fact afterwards confirmed by the death of the patient.

Dr. Aitken gives this rule to the clinical observer:—*A rise to about* 99·5°, *or a depression below* 97·3°, *is a sure sign of some kind of disease, especially if the change is persistent.*

In *acute fevers*, the thermometer affords the best means of deciding a doubtful case; it is often the best corrective of a

* Dr. Ringer states that in persons under 25, the average maximum temperature is 99·1°; in those over 40, 98·8°.

too hasty conclusion, and is indispensable for prognosis. In Typhus, Enteric fever, Variola, Scarlet fever, Rheumatism, Pyæmia, Pneumonia, etc., a rise of temperature to 100° or 101° indicates a mild attack; to 104° or 105°, remaining constant, a severe attack; to 106° or 107°, great danger; to 109° or 110°, a fatal termination.

In *Enteric fever*, the rise of temperature, or its abnormal fall, frequently indicates what is about to happen one or two days before any change in the pulse, or other sign of mischief, may be observed. At the beginning of the second week a temperature of 102° or 103°, in the evening shows a mild, 104° or 105° a severe case.

In *Consumption*, the thermometer affords us most valuable diagnostic information, especially in the early stage of the disease, when treatment is likely to be of greatest avail, and when the symptoms are often obscure, or their true cause is doubtful. The aid afforded by the thermometer in this case will be recognised by the fact that during the deposit of tubercle in the lungs, or in any organ of the body, the temperature of the patient is always raised from 98°, the normal temperature, to 102° to 103°, sometimes even higher, the temperature increasing in proportion to the rapidity of the tubercular deposit. 101° indicates that no serious suppurative change is going on. A persistent elevation of the general temperature of the body has often been found to exist for several weeks before loss of weight, or physical signs indicating tubercle in the lungs, could be appreciated. Hence an elevated temperature not only affords us certain information as to the existence of *Phthisis*, but the *degree* of that elevation enables us to estimate the extent and progress of the disease; for a persistent and increasing rise shows that the disease is progressing, or that unfavourable complications are setting in.

In *Measles*, the thermometer is almost the only means of learning at an early stage the invasion of Pneumonia.

In *Ague*, several hours before the paroxysm, the temperature of the patient's body rises considerably, and, so long as it remains high, the disease retains its hold.

In *Acute Rheumatism*, a temperature of 104° is always an alarming symptom, indicating grave complication, such as

involvement of the valves of the heart. In short, a temperature of 104° to 105° in any disease indicates that its progress is not checked, and that complications are liable to arise.

In all cases of convalescence, so long as the decrease of temperature proceeds regularly, as measured by the thermometer, no *relapses* need be feared; on the other hand, a tardy decrease of temperature in Pneumonia, the persistence of a high evening temperature in Typhus or Enteric fever, or in the eruptive diseases, and the incomplete attainment of normal temperature in convalescence, are signs of great significance. They indicate incomplete recovery, the approach of other diseases, unfavourable changes in the products of disease, or the continuance of other sources of disturbance requiring careful examination. The onset of even a slight elevation of temperature during convalescence is a warning to exercise careful watch over the patient, with a special view to maintaining a due control over his diet and actions. On the other hand, a fall in the temperature of the body may be observed in Remittent fever, Intermittents, acute collapse, chronic wasting diseases, and in acute fevers, on the approach of death.

Dr. Finlayson, of Glasgow, some years ago, devised a chart for placing these changes clearly before the eye, curves of different colours being used to denote the variations in the morning and evening temperatures. A diagram is useful for rapid comparisons and for demonstrations; but the figures are more worth noting, as they can be easily converted into a diagram, while the reverse is not so easy.

Dr. Aitken states that there is a correspondence between the rise in temperature and the greater rapidity of the pulse —1° of heat to 10 beats a minute; thus, a temperature of 98° corresponds to a pulse of 60, 99° to 70, 100° to 80, 101° to 90, 102° to 100, 103° to 110, 104° to 120, 105° to 130, 106° to 140.

We now describe the kind of instrument that will be most useful (*see illustration*). The bulb should be so formed that it receives impressions from the slightest atmospheric changes, the stem should be graduated to allow of readings to one-fifth

of a degree Fahr., and the shape of the instrument such as to make it easy of introduction into any desired part. Accuracy can be ensured by having the instrument verified at Kew, and repeating the verification after a time when age and use may have produced variations; but, as it is the *relative* rise or fall of temperature rather than the exact degree, which latter perhaps is always only proximately arrived at, if the *same* instrument be used at the *same* time and in the *same* manner, the desired end will be gained. A self-registering instrument is useful when a nurse or attendant makes the observations, or when there is insufficient light, or it is undesirable to bend closely over the patient; otherwise any defect in applying the instrument is more readily noticed by the fall of the mercury, when there is no index. The temperature is tested in various parts, as the mouth, the axilla or the groin, the rectum, and the vagina. The instrument should be slightly warmed by the hand till it reaches about 94°, and then applied. Several observations should be made in a day in all cases of serious illness, especially with children. Great care should be taken to be sure that the instrument is in close contact with the mucous membrane or skin, that it is not removed too soon, and that it is read immediately on removal, if it be not self-registering.



In order to "take a temperature" by the *mouth*, the bulb of the thermometer should be under the tongue, by the side of the last molar—"wisdom tooth"—and the patient requested to close the lips around the stem. The time required to ascertain the temperature correctly will vary with the intelligence or power of the patient to co-operate with the observer. Time might be saved by requesting the patient to keep his mouth closed for a few minutes previously, in order that the mucous surface may gain the temperature of the deeper parts before the introduction of the instrument. It is always desirable to wait a few minutes to see that the mercury is stationary before concluding the test.

The *axilla* resembles the mouth in not being always a closed cavity, therefore it is expedient to let the arm be pressed close

to the thorax for a short time before taking the temperature. If there be excessive perspiration, the arm should first be wiped dry; and when children are thin, the groin would better answer the purpose. Five or six minutes may be long enough, but occasionally it may require twenty minutes or even longer to obtain the maximum. The bulb must obviously not be allowed to slip out of place, but should be well covered. If the temperature be high, an approximate estimate may be obtained in less time, but a low temperature should not be hastily inferred. The *rectum*, being a closed cavity, affords the quickest means of taking the temperature, and is best in the case of children. If in bed, the patient assumes a convenient posture on his left side, the instrument is oiled, and carefully inserted about two inches within the anus, and gently held in position, while the child is induced to lie still by engaging his attention. Very young children might be placed on the mother's lap, with their face towards her right breast. Three or four minutes only will be necessary; but the mercury should become stationary, as before stated. An elastic band might be used to mark two inches upon the instrument; a further introduction would give a higher temperature. In puerperal cases, the temperature is best taken through the *vagina*. But the senses should not be superseded by instruments; on the contrary, they should be carefully trained to detect physical signs, independently of artificial assistance. By habitually testing the temperature palpably after doing so by means of a thermometer, the hand may be so educated as to discover temperatures within a degree or two, and to afford additional information as to pungency, unobtainable from an instrument. This *tactus eruditus* will enable the practitioner to take the temperature of different parts in quick succession, and being always available, would prove more valuable than any instrument, which, however exactly constructed for the purpose, would be inadmissible in ordinary practice.

17.—Rigors.

The condition denoted by the word *rigors* (from *rigeo*, I am chilled, or horrified) is caused by the undue contraction of the

arteries; the skin receives less than its proper share of blood, and less than its due share of the heat which is generated within the body, and is marked by a roughness and a pale or livid appearance of the cuticle; the common shivering of the limbs and chattering of the jaws being the effects of successive brief contractions. When induced by a feeling of horror, the accompanying bristling up of the hair is termed *horripilation.*

This affection is of great diagnostic importance, both in medicine and surgery. Early in most severe febrile disorders the nervous system gives intimation thereof by a shivering fit which may recur at irregular intervals, but chiefly in the evening. Rigors form one of the most constant symptoms of Pneumonia in adults, and their frequency and intensity are greater in this than in almost any other disease. In Pyæmia, Ague, and Puerperal fever they are very common and violent, and occur with frequency. Idiopathic Pneumonia is frequently ushered in by a day or two of feverishness, or undefinable feeling of illness. This is generally succeeded by a sudden and severe rigor, or by a succession of rigors, or in children by an attack of convulsions. They are also symptomatic of acute Dysentery, Rheumatism, Erysipelas, and the Zymotic fevers. They occur when there is any severe injury to the body, a stretching of fibrous tissue, an operation or the dread of an operation, the introduction of a catheter, the passage of gall-stones, the absorption of hurtful drugs, the suppurative process, etc., the rigors being in proportion to the sensitiveness of the individual. The sensations of cold of which patients complain are, however, merely subjective, for on placing the thermometer in the axilla it shows a temperature probably several degrees above the normal standard.

Rigors are not common in young children; convulsions take their place. Even when suffering from Intermittent fever the cold stage is only marked by pallor of face, discoloration of the lips, and a bluish tint beneath the nails.

Sometimes a rigor may be simply the effect of a low temperature of the atmosphere, or even of emotion. Hence Rigors have been classed as neurotic, morbid, thermal, or emotional.

18.—The Pulse.

The pulse is produced partly by the forcible expulsion of blood from the heart, through the *aorta* (the great arterial trunk), and thence into the various arteries of the body, by each contraction of the left ventricle of the heart; and partly by the innate contractility of the arterial walls. Its character will, consequently, be modified by the condition of the heart, the blood-vessels, and the blood itself.

In feeling the pulse, great gentleness should be observed, so as not to quicken the action of the heart, which would defeat the object in view. The pulse may be examined in any part where an artery is so close to the surface that its throb can be plainly felt; but in general the most convenient locality is at the wrist. While examining the pulse, there must be no pressure exerted upon the artery in any part of its course, by tight sleeves, ligatures, etc. The examiner should place three fingers just above the root of the thumb and the joint of the wrist, with his thumb on the opposite side, so as to be able to regulate the pressure at will. Its frequency may then be measured by the seconds-hand of a watch; but the educated hand of the medical man will be required to detect and appreciate its peculiar characteristics, as indicative of various phases of disease; its rhythm, its fulness, or softness; whether by compression it may be rendered less perceptible; whether it is strong and bounding, forcing the fingers almost from the arm; or hard, small and wiry, like the vibrations of a string; or intermittent, striking a few beats, and then apparently stopping for one or two beats; or whether the pulsations, flowing into each other, are small and almost imperceptible.

Healthy Pulse.—The healthy pulse may be described as uniform, equal, moderately full, and swelling slowly under the fingers. In old age, the pulse becomes hard, owing to increased firmness or to structural change in the arterial coats. The average number of beats in the minute, at different ages, is as follows:—At birth, 140; during infancy, 120 to 130; in childhood, 100; in youth, 90; in adult age, 75; in old age, 65 to 70; decrepitude, 75 to 80.

The pulse is influenced, however, by the following and other conditions, which should be considered in estimating its character as a diagnostic sign. It is faster in the female than in the male, by from six to fourteen beats, and also smaller; but this difference only occurs after about the eighth year. It is quickened by exertion or excitement; it is more frequent in the morning and after taking food; it beats faster standing than sitting, and sitting than lying; but it is retarded by cold, sleep, fatigue, want of food, and by certain drugs, especially *Digitalis*.

Pulse in Disease.—In estimating the differences of the pulse as signs of disease, allowances must be made for those sudden irregularities which are often observable under transient excitement or depression, especially in nervous persons.

The rapid pulse, if strong, full, and hard, indicates inflammation or fever; but if small and very rapid, it points to a state of great debility, such as is often present in the last stage of Enteric and other exhausting fevers.

The jerking pulse, marked by a quick and rather forcible beat, followed by a sudden, abrupt cessation, as if the direction of the wave of blood had been reversed, is indicative of structural disease of the valves of the heart.

The intermittent pulse, or that in which a pulsation is occasionally omitted, is frequently owing to some obstruction of the circulation in the heart or lungs, to Inflammation or softening of the brain, Apoplexy, etc.; it is also observable in some forms of valvular disease of the heart; and where *Hernia*, or *Enteritis*, has proceeded to *Gangrene* of the intestine. But intermittency is not always of grave import, for excessive or prolonged exertion, watching, want of rest, anxiety, etc., may produce it, or in a minor degree, Indigestion with flatulence.

The full pulse occurs in general plethora, or in the early stages of acute disease; while the *weak pulse* denotes impoverished blood, and an enfeebled condition of the system.

When the pulse resists compression, it is said to be *hard*, *firm*, or *resistant*; when it is small as well as hard, it is said to be *wiry*.

19.—Breathing.

Healthy inspiration is performed with great ease, by a nearly equal elevation of the ribs and enlargement of the chest, and by descent of the diaphragm. Expiration is the return of the chest to its natural proportions during rest, which is produced by the pressure of the external air, the ascent of the diaphragm, and contraction of the abdominal muscles. An adult breathes about twenty times in a minute. Disease and exertion quicken the rate of breathing.

Dyspnœa, or difficult breathing, may result from wasting diseases of the lung-substance, or adventitious deposits in those organs (both necessarily lessening the amount of breathing surface); from formations of false membranes in the air passages, as in Diphtheria; inflammation and swelling of the tonsils or tongue; and spasms of the muscular coat of the air tubes, as in Asthma—all of which conditions obstruct the entrance of air into the lungs, and thus cause Dyspnœa.

Effusions into the pleura or pericardium, the serous membranes surrounding the lungs and heart, induce Dyspnœa by compression of the lungs. Intrinsic organic and functional diseases of the heart also create Dyspnœa. Further, disease of the nerves which preside over the respiratory movements, or in that part of the nervous centres from which they proceed, may produce serious difficulty of breathing. In Pleurisy, fracture of the ribs, Apoplexy, and cases of great exhaustion, when an insufficient supply of blood is sent to the great nervous centre — the brain — the respiratory movements are deranged, and sometimes greatly or even fatally obstructed.

20.—The Tongue.

This organ affords important indications:—*Dryness* points to diminished secretion, and is common in acute and febrile diseases: *moisture* is generally a favourable sign, particularly when it succeeds a dry or furred condition. A preternaturally *red tongue* is common in the course of the eruptive fevers; in Gastric and Bilious fevers, and in bad cases of Indigestion,

the redness is often limited to the edges and tip. The "strawberry" tongue is a symptom of Scarlet fever; the fissured tongue of Enteric fever and Typhus. When the tongue is *livid* or *purple*, there is defective oxygenation of the blood. The *furred tongue* is the most marked, and is common in inflammation and irritation of the mucous membranes, in diseases of the brain, in all varieties of fever, and in almost all acute and dangerous maladies. Some persons have usually a coated tongue on rising, without any other symptom of disease. This is especially the case with tobacco smokers. A uniformly white-coated tongue is not very unfavourable; a yellow coat is indicative of disordered action of the liver; a brown or black, of a low state of the vital powers, and contamination of the blood. The gradual cleaning of the tongue, beginning at the tip and edges, shows a tendency to health, and indicates the cleaning of the whole intestinal tract; in less fortunate cases, as the tongue assumes a browner, dirtier, and drier appearance each day, the nervous and muscular systems become weaker, and hope is gradually extinguished; when the fur separates in patches, disclosing a red, glossy surface, or when the crust is rapidly removed, leaving a raw or dark-coloured appearance, the prognosis must still be unfavourable.

The entire organ should be inspected,—the tip, the edges, and the upper surface back to the uvula; the gums and the palate too; for all indicate the condition of the continuous alimentary track. Eagerness to show it may be a sign of Hypochondriasis; slowness of protrusion may arise from nervousness and prostration, or from stiffness of the organ from disease. The circumstances of inspection should be considered; if the patient has recently awoke, or has just taken some fluid, these facts must be taken into account.

21.—Pain.

Pain affords a most important indication of the nature and seat of disease, by pointing to an interruption of the harmonious action of the bodily organs. When attended with a

throbbing sensation, consequent upon the heart's irregular action, it is called *pulsating pain;* when with a feeling of tightness, *tensive;* when with heat, *burning*. *Nervous* pain may be recognised by its disposition to follow a certain course, without being rigidly limited to one particular part; by its being subject to perfect intermissions; and by the suddenness with which it comes and goes. *Spasmodic* pain is mitigated by pressure, by frictions, and by applications of heat; it comes on suddenly with greater or less severity, and terminates abruptly. *Inflammatory* pain is constant, attended by heat and quickened pulse, is increased by movement of the affected part, by touch or pressure, and usually mitigated by rest. Pain of this nature frequently occurs, not in the part diseased, but in a distant one; *e.g.*, inflammation of the liver generally first shows itself by pain in the right shoulder; inflammation of the hip-joint by pain in the knee; stone in the bladder by pain at the end of the penis; disease of the heart by pain down the left arm, etc.

22.—The Skin.

In health the skin imparts to the touch the sensation of an agreeable temperature, with just sufficient moisture to preserve its softness; it is also elastic, smooth, and neither too tense nor loose. A *harsh, dry, burning heat* of the skin is indicative of fever, and must ever be regarded as unfavourable, especially in inflammatory stages of internal disease. If this condition be followed by *perspiration*, coincident with general improvement, it is a favourable indication. Great relief is usually experienced on the occurrence of the sweating stage in Ague, Inflammatory fevers, etc. On the other hand, complications may be feared if perspiration ensue without any amelioration of other symptoms.

Partial or local perspirations indicate a deranged condition of the nervous system, or an affection of the organs beneath the perspiring surface. If perspirations occur after trifling exertion, they point to excessive weakness. Night sweats, of frequent occurrence, not only show debility, but when preceded by chills and fever, indicate Hectic and Phthisis.

The *colour* of the skin is also diagnostic. A bluish tint of the skin indicates structural disease of the heart. A yellow tinge points to biliary affections. A rich blush of the cheeks, especially if it be circumscribed, and the surrounding parts pale, is symptomatic of an irritable condition of the nervous system, or a diseased state of the lungs.

23.—The Urine.

The urinary organs are,—the kidneys and bladder, with their appendages. The kidneys secrete the urine from the blood, and by this process the blood is relieved of many impurities, which if retained would give rise to disease in the whole system. The secretion of the kidneys reaches the bladder through little channels (*ureters*), and, when the bladder is filled, is discharged through the urinary canal (*urethra*).

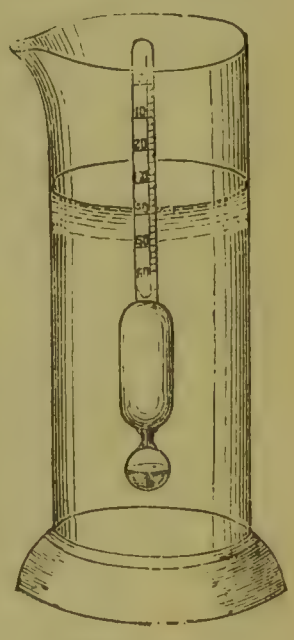
Healthy urine is of a brightish yellow or amber colour, a tint darker in the morning than in the afternoon, yielding a slight ammoniacal smell, devoid of unpleasant odour, and precipitating no deposit on standing, or only the merest trace of mucus, or of urates from a low temperature. In advanced age, the urine becomes darker and slightly offensive; it is darker in persons who lead a very active life; different varieties of food also produce a marked effect both on the colour and odour of urine. The stream of urine should be round and large, and it should be passed about four to six times in twenty-four hours, without any pain or straining.

The average *specific gravity* of healthy urine is between 1,015 and 1,025, being in excess of water, which is the standard (1,000), and the normal quantity in adults about fifty ounces in the twenty-four hours.

A little instrument for testing urine may now be obtained of all chemists. Its usual form is shown in the accompanying illustration. To ascertain the specific gravity of a specimen of urine, fill the cylindrical vessel about two-thirds full, holding the cylinder obliquely while pouring the urine into it, thus avoiding as much as possible the formation of foam

—if foam forms, remove it with blotting-paper; next let the urinometer sink, bulb down, gently into the urine being careful not to have touched the sides of the cylinder. When it no longer sinks of its own accord, stoop down until the eye is on a level with the urine and read the number on the scale which is even with the lower convex edge of the fluid—*i.e.*, not the little elevation of liquid which by capillary attraction climbs up the stem of the urinometer a short distance, but the general surface of the urine. Depress the urinometer one degree, allow it to rise, and read again; if the second reading agrees with the first, the figure is correct.

In disease, the urine presents many varieties, and furnishes valuable indications to the pathologist. Thus it may be of a dark yellow or saffron colour, as in jaundice, or derangement of the liver; it may be red or high-coloured, and scanty, with quickened pulse, as in fever; it may be bloody or slimy, as in affections of the kidneys or bladder; it may be pale and copious, when metamorphosis is checked, less urea excreted, and no colouring matter is furnished by the unrenewed blood, as in nervous and hysterical ailments; it may be heavy, muddy, or of a purple colour, showing an unfavourable condition of the system; or it may be dark or black, indicating putridity. The urine may be passed too scantily, with pain and effort, or too copiously, being retained with difficulty. There may be a frequent or uncontrollable desire to micturate, with burning or scalding pain; or the pain may be only experienced in passing the last few drops; in either case, local inflammation is indicated.



The specific gravity of urine in Bright's disease is 1,015 to 1,094; diabetic urine, 1,030 to 1,070, according to the severity of the disease; in Hysteria it may be as low as 1,007.

When urine has to be examined, a little should be taken from the whole quantity that has been passed during twenty-four hours, as it varies greatly in its properties at different

periods of the day, a variation which has necessitated the employment of distinctive terms, as, *urina potus*, that which is passed soon after taking fluids; *urina chyli*, after digestion; and *urina sanguinis*, after a night's rest. But, owing to its tendency to decompose, as little time as possible should be lost in making an earlier additional examination of the urine, when that is necessary. On an average 950 parts in 1,000 will represent the proportion of water, of which latter element *urina potus* contains 21 parts at least above *urina chyli*. *Urina sanguinis* affords a fair specimen of the secretion. An examination of urine has reference to the quantity, the acidity or alkalinity, the specific gravity, the effect produced on it by heat, or the presence in it of unhealthy deposits, as sugar, blood, casts of tubes, etc. With regard to quantity, a diminished or excessive secretion may be referable to a temporary cause, as the amount of fluids taken, or the exudation of vapour through the pores of the skin; or to a permanent one, namely, some local or constitutional disease. Litmus and turmeric papers are the test for acidity or alkalinity. In Rheumatic fever, in Gout, etc., the urine is abnormally acid; while, on the contrary, a loss of nervous power sometimes causes insufficient mucus to be secreted, so that, decomposition having taken place, the urine is found to be alkaline. A urinometer serves to indicate the specific gravity. Heat will produce a deposit in acid urine, but not so in alkaline, however large a proportion of albumen it may contain. The microscope enables us to detect casts of tubes, etc., but it should be remembered that many substances may have found their way into the vessel, as fibres of deal, flannel, or cotton, etc., which bear a sufficient resemblance to be mistaken for the above.

Enquiry should be directed to the sensations of the patient before, during, and after urination; the frequency, especially at night; the size and quantity of the stream.

CHAPTER III.

The Medicines, etc.

24.—Forms, Names, and Attenuations.

We recommend the professional enquirer to procure a SMALL CHEST, in which to keep, protected from light and heat, and apart from substances emitting a strong odour, the fifty remedies that we proceed to indicate; and to commence testing their efficacy in simple cases. Only a small quantity of each will be required, but it should be a first consideration to procure genuine medicines. Dyspepsia, facial Neuralgia, simple Fever, Croup, Hæmorrhage, Rheumatic fever, Pleurisy, Pneumonia, etc., are speedily and favourably impressed by suitable remedies; and we are persuaded that the effects of medicines, carefully selected according to the directions of this book, will prove so encouraging that he will derive confidence to extend his trials. But, in deference to his patient's welfare, let him by no means relinquish a remedy with which he is familiar till he has succeeded (as, doubtless, he will eventually) in discovering a homœopathic one of superior efficacy. After some knowledge of the system has been acquired, a MAHOGANY CABINET, designed expressly for medical men, and forming a very compact and useful medical store, may be obtained from some homœopathic druggists, which will be found well adapted to the requirements of medical men and students using this Text-book.

The cabinet in question is 24 inches in height, 17 in breadth, $12\frac{1}{2}$ inches in depth, and consists of five drawers secured under one lock and key. The four upper drawers contain 216 half-ounce, 120 two-drachm, and 63 one-ounce phials, a portion of which only we recommend to be filled at first, the remainder being reserved for the requirements of his more matured experience. The bottom drawer is constructed to hold tinctures for external use, sugar of milk, cerates, powder-papers, powder-folder, tin-foil, spare phials, corks, pilule boxes, scissors, plaster, lint, instruments, etc.

The following brief description of the different forms of medicine used in homœopathic practice is given for the sake

of the uninitiated. The preparations are of four kinds, viz., *Tinctures, Pilules, Globules,* and *Triturations.*

Tinctures.—These contain the active principles of the vegetable medicines, in a more or less concentrated form, and also constitute the liquid attenuations of all medicinal substances, whether animal, vegetable, or mineral. They are supposed to be quicker and more decided in their action, in acute diseases, than either pilules or globules. It is therefore advisable for those who are commencing homœopathic practice to be furnished, in addition to a complete case of the pilules or globules, with such a selection of the tinctures as are adapted to sudden and acute diseases. The selection recommended by the author for this purpose is numbered in the annexed list as follows: 3, 8, 9, 15, 20, 34, 37, 39, 41, 43, 44, 50.

Pilules.—*Pilules* consist simply of a porous non-medicinal substance (generally cane-sugar), medicated by saturation with any remedy desired; if kept in well-corked phials, they retain their virtue for years; they are very tangible, and well suited for dispensary and domestic use, especially when commencing the practice.

Globules.—*Globules* are about the size of poppy seeds, and are prepared in the same manner as pilules. Though considered convenient for administration to infants, they are not very tangible, and their appearance has done much to excite prejudice and ridicule. We are not sorry, therefore, to find that they are now fast giving place to pilules.

Triturations.—These are powders, containing a portion of the particular drug triturated with a given quantity of sugar-of-milk, and are necessary to the administration of the lower attenuations of *insoluble* medicines, such as *Calcarea, Carbo Veg., Hepar Sulph., Mercurius, Silicea,* etc.

In addition to the fifty remedies in the following list, many others are occasionally prescribed, the more common of which are briefly described, with reference to their general uses, in the Materia Medica. This more complete list is given in the table of contents at the commencement. For further information upon the subject the student is referred to *Jahr's Symtomatology, Hempel's Materia Medica,* or similar works devoted to special departments of medical science.

LIST OF THE MOST COMMON MEDICINES PRESCRIBED IN THIS TEXT-BOOK.

With their Latin and English Names, their Abbreviations, and the Attenuation, in Tinctures, recommended for general use.*

	Latin.	English.	Abbrev.	Atten.*
1.	**Acidum Nitricum**	Nitric Acid	*Ac.-Nit.*	1
2.	**Acidum Phosphoricum**	Phosphoric Acid	*Ac.-Phos.*	1
3.	**Aconitum Napellus**	Monk's Hood	*Acon.*	3x
4.	**Antimonium Tartaricum**	Tartar Emetic	*Ant.-Tart.*	3
5.	**Apis Mellifica**	Honey-Bee	*Apis*	3x
6.	**Arnica Montana**	Leopard's Bane	*Arn.*	3x
7.	**Arsenicum Album**	White Arsenic	*Ars.*	3x
8.	**Belladonna**	Deadly Nightshade	*Bell.*	3x
9.	**Bryonia Alba**	White Bryony	*Bry.*	3x
10.	**Cactus Grandiflorus**	Midnight-blooming Cereus	*Cact.*	3x
11.	**Calcarea Carbonica**	Carbonate of Lime	*Calc.*	5
12.	**Cantharis**	Spanish Fly	*Canth.*	3x
13.	**Carbo Vegetabilis**	Vegetable Charcoal	*Carbo V.*	5
14.	**Chamomilla Matricaria**	Wild Matricary	*Cham.*	3x
15.	**China**	Peruvian Bark	*Chin.*	1x
16.	**Cimicifuga Racemosa**	Black Snake-root	*Cimic.*	3x
17.	**Cina Anthelmintica**	Worm-seed	*Cin.*	3x
18.	**Cocculus Indicus**	Indian Berries	*Cocc.*	3x
19.	**Coffea**	Raw Coffee	*Coff.*	3x
20.	**Colocynthis**	Bitter Cucumber	*Coloc.*	3x
21.	**Cuprum Aceticum**	Acetate of Copper	*Cup.-A.*	3x
22.	**Digitalis**	Fox-glove	*Dig.*	3x
23.	**Drosera Rotundifolia**	Round-leaved Sundew	*Dros.*	1x
24.	**Dulcamara**	Bitter-Sweet	*Dulc.*	3x
25.	**Ferrum Muriaticum**	Muriate of Iron	*Ferr.-Mur.*	1x
26.	**Gelseminum Sempervirens**	Yellow Jessamine	*Gels.*	1x
27.	**Hamamelis Virginica**	Witch Hazel	*Ham.-Virg.*	1x
28.	**Hepar Sulphuris**	Liver of Sulphur	*Hep.-S.*	3
29.	**Hydrastis Canadensis**	Golden Seal	*Hyd.-Can.*	1x
30.	**Hyoscyamus Niger**	Henbane	*Hyos.*	3x
31.	**Ignatia Amara**	St. Ignatius' Bean	*Ign.*	3x
32.	**Iodium**	Iodine	*Iod.*	3x
33.	**Ipecacuanha**	Ipecacuanha	*Ipec.*	1x
34.	**Iris Versicolor**	Blue-Flag	*Iris V.*	3x

* When the medicines are prepared in pilules or globules the attenuation of several of them must be slightly modified, according to the discretion of a qualified chemist. The attenuations marked in the list are only approximative, and it is probable that, as the experimenter advances, he will prefer many of the remedies in a lower attenuation, and even in a few cases, as the author does himself, in the matrix tincture.

Latin.	English.	Abbrev.	Atten.
35. **Kali Bichromicum**	Bichromate of Potash	*K.-Bich.*	3
36. **Lycopodium Clavatum**	Common Club-moss	*Lyc.*	5
37. **Mercurius Corrosivus**	Corrosive Sublimate	*Merc.-C.*	3x
38. **Mercurius Solubilis**	Impure Oxide of Mercury	*Merc.-S.*	3
39. **Nux Vomica (Strychnos)**	Nux Vomica	*Nux V.*	3x
40. **Opium**	Opium	*Opi.*	3x
41. **Phosphorus**	Phosphorus	*Phos.*	3x
42. **Podophyllum Peltatum**	May-Apple	*Podoph.*	ϕ
43. **Pulsatilla Nigricans**	Wind Flower	*Puls.*	3x
44. **Rhus Toxicodendron**	Poison-Oak	*Rhus*	3x
45. **Sepia Succus**	Inky Juice of Cuttlefish	*Sep.*	5
46. **Silicea**	Pure Flint	*Sil.*	5
47. **Spigelia Anthelmia**	Indian Pink	*Spig.*	3x
48. **Spongia Tosta**	Toasted Sponge	*Spong.*	3x
49. **Sulphur**	Sublimed Sulphur	*Sulph.*	3
50. **Veratrum Album**	White Hellebore	*Verat.*	3x

Also the strong tincture of **Camphor**, which must be kept by itself.

Mother Tinctures for External Use.

Arnica Montana ϕ **Cantharis Vesicatoria** ϕ **Ledum Palustre** ϕ
Calendula Officinalis ϕ **Hamamelis Virginica** ϕ **Rhus Toxicodendron** ϕ

These are recommended to be kept, with Arnica-plaster, strapping-plaster, scissors, forceps, oiled silk, lint, etc., in a compartment separate from the medicines in the body of the chest.

A useful case for the pocket would include remedies numbered in the list above printed, 3, 6, 7, 8, 9, 14, 15, 20, 26, 31, 33, 37, 39, 41, 43, 44, 49, 50.

Corks.—If a cork decay, or become damaged, a new one should be at once substituted. Except for acids, good sound corks are preferable to glass stoppers, as they more effectually prevent the virtue of the medicine from evaporating, and are easily replaced when broken. Missionaries, emigrants, etc., should take a supply of new corks. Immediately after use, a bottle should always be recorked, and the corks or medicines should never be changed from one bottle to another. If the above directions are observed, the medicines may be kept unimpaired for years.

Genuine Medicines. To obtain a beneficial action from the remedies herein prescribed, it is essential to procure them from a person of known character, who has been trained, and who is exclusively engaged as a homœopathic chemist.

Failures in homœopathic practice often arise, no doubt, from deteriorated medicines. Inasmuch as any person has been hitherto allowed to assume the designation of "Homœopathic chemist," without submitting to any test of qualification, and the recent Pharmacy Act, being prospective, does not affect any person who, at the time of its coming into operation, had already been in practice as a druggist, there is the greater need for exercising caution as to the source from whence the medicines prescribed are obtained. Persons who are in doubt on the subject, and in whose locality there is no such chemist as we have indicated, should consult a homœopathic medical man, who will inform them of trustworthy persons from whom the medicines may be procured. Homœopathic remedies should not be purchased from an allopathic druggist's shop, unless a separate room is specially appropriated to them, for the medicines are liable to injury from close proximity to strong-smelling drugs; and, further, Homœopathy, with such associations, is generally kept in the background. Druggists, with few exceptions, are opposed to Homœopathy; they often depreciate it, and, with more or less success, recommend their own preparations in preference.

25.—Doses and their Repetition.

The Dose.—In determining the quantity and strength of doses, the age, sex, habits, nature of the disease, etc., must be taken into consideration. Without reference to individual peculiarities, the following may be stated as the proper dose in general practice:—

For an adult, two drops of the tincture, three pilules, six globules, or one grain of the trituration.

For a child, about one-half the quantity.

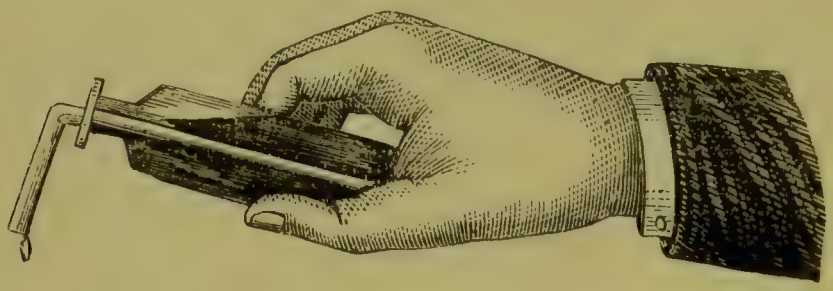
For an infant, about one-third.

Drops or *pilules* are easily divided into any number of doses by mixing them in a corresponding number of spoonfuls of water, and giving one spoonful for a dose. Spoons for the *triturations* may be obtained, holding about one grain.

Directions for taking the Medicines.—Tinctures should be dropped into a glass by holding the bottle in an oblique

manner, with the lip resting against the middle of the lower surface of the cork; the bottle should then be carefully tilted, when the tincture will descend and drop from the edge of the cork. Or, which is a much easier method, a piece of solid glass, bent at a right angle, about three-sixteenths of an inch in diameter, and introduced into the bottle, as shown in the illustration. This simple contrivance enables the most nervous person to drop the tinctures with exactness. Water should then be poured upon the medicine in the proportion of a table-, dessert-, or tea-spoonful to a drop, according to the prescriber's direction.

The vessel should be clean, the mixture kept covered, and the spoon used should not be left in the mixture.* If the medicine has to be kept several days, a new bottle, with a new, sound cork, should be used.



Pilules or *globules* may be taken dry on the tongue, and sucked, not swallowed whole; but it is better, if convenient, to dissolve them in filtered water.

The insoluble *Triturations* should be taken dry on the tongue; the soluble ones may be dissolved in a spoonful of water. Before taking medicine, the mouth should be rinsed with water.

Hours.—The most appropriate times for taking the medicines, generally, are,—on rising in the morning, and at

* Glazed spoons, and graduated fine earthenware medicine-cups, with covers, numbered 1 and 2, specially made for this purpose, and sold by homœopathic druggists, are the most suitable. These cups are recommended, as they protect the medicines from light and dust; and, further, because mixtures prepared in glasses or other domestic vessels are often thrown away by mistake, sometimes causing great inconvenience.

bed-time; if oftener prescribed, about half-an-hour or an hour before, or about two hours after, a meal. Under no circumstances should a patient be aroused from sleep to take medicine.

Repetition of Doses.—The repetition of the dose must be determined by the character of the malady from which the patient is suffering, the urgency of the symptoms, and the effects produced. In violent and dangerous diseases—Cholera, Croup, Diphtheria, Convulsions, Rheumatic fever, etc.—the remedies may be repeated every ten, fifteen, or thirty minutes; in less urgent cases, every two, three, or four hours. In short, an attempt should be made to bring the influence of the drug to bear at once and continuously, by a repetition at such intervals as may be indicated by carefully watching the effects. The right remedy may be chosen, but it may be given so late or so seldom that it is vain to expect it to keep pace with the rapid progress of acute disease. In chronic maladies, however, when, the progress of disease being slow, we can only hope after the lapse of days or weeks to effect perceptible results, a dose every eight, twelve, or twenty-four hours may suffice. The common formula of administering remedies three times a day is not, therefore, to be rigidly observed. Further, in all cases, when improvement takes place, the medicine should be administered less frequently, and gradually relinquished. In a long course of medical treatment we usually direct the patient to omit all medicine on some given day of the week.

Alternation of Medicines.—To avoid the confusion resulting from mixing different remedies in one prescription, and to ascertain the pure effect of each, Homœopaths do not mix several drugs together; but in acute diseases, when the symptoms of the malady are not met by a single remedy, and a second one is indicated, the two may be given in *alternation;* that is, one medicine may be followed by another at certain intervals of time, and in a regular order of succession. In Croup, for example, *Acon.* and *Spongia* or *Acon.* and *Iod.;* in Pneumonia, *Acon.* and *Bry.;* etc. Except in violent and rapid diseases, the author rarely prescribes medicines alternately, and strongly recommends the general discontinuance

of that method as one little calculated to yield exact and definite clinical experience. In order to test the value of any remedy it should be given alone. In combining medicines we lose all exact data concerning the real action of any single agent.

PART II.

Accessories in the Treatment of Disease.

Sick Diets.

One of the great difficulties of the sick-room is to induce the patient to take a sufficient quantity of food. On the one hand, it should be remembered that the body is nourished by the assimilation of the food, and not by the quantity that is taken, and that the assimilating power is feeble and may be too severely taxed if too much food be given. Hence, while judicious coaxing may be needed, the worrying, incessant solicitation of some well-meaning but unwise friends is often distressing and prejudicial to the patient. On the other hand, it should be borne in mind that the desire for food, and, indeed, its assimilation, depend in some measure on the way in which it is presented. It should please the eye and be agreeable to the palate; it should be varied in kind and in method of preparation. Not a few evils are consequent on an unsuitable dietary, or on the improper preparation of suitable food; evils occasioned by poverty or ignorance, or more frequently by indiscretion. As much derangement of health and slow convalescence is due to dietetic errors, the instructions of the physician with regard to food as well as with regard to medicine should be attended to.

26.—Food for Invalids, etc.

Beef-tea.—1. Half a pound (or a pound, according to the strength required) of rump steak should be cut up into small pieces, and put into a covered enamelled saucepan with one

pint of cold water. Let this stand in a cool place for several hours, and let it then simmer gently for two hours. Skim well, and serve. If grease be specially repugnant, the last traces may be removed by lightly skimming the surface with pieces of blotting paper.*

2. The same proportions of beef and water, placed in an earthen vessel, lightly covered, and allowed to stand in a hot-water bath for several hours, is a plan much commended.

3. Another method is to heat the meat and water gradually to the boiling point, and then strain immediately.

4. Again, take of shredded beef, one pound; water, one pint; strong *Muriatic Acid*, twenty drops; allow this to stand for six hours, and strain, and a very nutritious beef-tea will be obtained, which may be served cold or hot, but should never be boiled, nor, indeed, heated to an unnecessary degree.

5. In order to make beef-tea, or any extract of meat, quickly, economically, and of a certain required strength, Dr. Leared recommends the use of a receiver having an air-tight screw cover with safety-valve, and a boiler. A small quantity of the beverage may be prepared as follows:—One pound of beef, divested of fat, bone, and gristle, and cut into very small pieces, should be put into the receiver, adding eight ounces of water. the cover screwed tightly on, and the receiver placed in the boiler, which has been filled with water. It should boil for three hours, when the receiver should be removed, and, when sufficiently cool, the cover unscrewed. After squeezing the meat, now a tasteless mass, thirteen ounces of beef-tea, without any loss of aroma, and three times stronger than that prepared in the ordinary way, will be obtained. As experiments prove that one pound of beef will yield five ounces of meat-juice, the extract can be more or less concentrated by regulating the proportion of water. The preparation can be made in one-third of the time, if salt be added to the water in the boiler. The extract of course becomes gelatinous, and consolidates on cooling, when bones or the sinewy parts of meat are used; but gelatine, contrary to the popularly-received opinion, is comparatively unimportant in nutrition.

* The *Homœopathic World* for October, 1889, contains an interesting account, by Dr. T. Skinner, of how to prepare "Liquid Beef" from the raw meat.

The meat used should be as fresh as possible—the fresher the better—and should be divested beforehand of all fat or gristle. If this precaution be neglected, a greasy taste is given to the beef-tea, which cannot afterwards be completely removed. In re-warming beef-tea which has been left to cool, care must be taken to warm the tea up to the point at which it is to be served, and no higher; this is best done, not by putting it on the fire, but in a covered vessel placed in hot water. When once allowed to get cold, it never regains the agreeable flavour it possessed when fresh.

Essence of Beef.—This is prepared as follows:—A pound of lean beef, free from skin, bone, and fat, should be cut up into small squares, put into a large earthen jar with cover, the edges cemented with flour paste; tied up tightly in a cloth; put into a saucepan, and boiled from one to two hours; the liquid essence should be poured off from the coagulated muscle, let stand till cold, and the fat skimmed off. This contains a large quantity of nutriment, is generally pleasant to the palate, and is particularly valuable in *extreme exhaustion*. A few teaspoonfuls may be given every one, two, or four hours.

Liebig's Extract of Meat is an economical and valuable preparation. It is invaluable in nearly all cases of *physical debility* and extreme emaciation, especially after profuse losses of blood; in collapse from wounds; for patients suffering from severe and prolonged fevers; or in the last stages of Consumption; in bad cases of Indigestion, when the stomach rejects all solid food; and as an article of diet for nursing mothers, etc. In cases of extreme exhaustion, the extract may be mixed with wine. As it is stimulating, it may take the place of tea and coffee, and will be found less liable than these to produce derangement of the digestive organs. An advantage arising from this extract is that it can be readily prepared.

These beverages, in common with any nutritious soups, offer to the patient, whose general bodily functions are more or less suspended, a fluid and easily assimilated form of food; and it is to this adaptation of the nourishment to the condition of the body that we must, in part at least, ascribe the beneficial results. They have a remarkable power of restoring the vigorous action of the heart, and dissipating the sense of ex-

haustion following severe or prolonged exertion, and may be recommended in preference to the glass of wine which some take after watching, preaching, prolonged mental effort, etc.

Rice (whole or ground), barley, isinglass, etc., may often be advantageously added to thicken beef-tea.

Mutton Broth.—This may be made in a similar manner to beef-tea, either plain or thickened. For this purpose, the best part of the sheep is the scrag-end of the neck, free from skin and fat, bruised and cut into small pieces.

Chicken Broth may be prepared from a full-grown young chicken, divested of head, neck, feet, skin, and fat. Toast should be given with it, or it will be rather insipid.

A similar preparation may be more readily made by using Gillon's "Essence of Chicken," which may be procured from any homœopathic chemist. This simply requires diluting with hot water in the proportions stated upon each tin.

Veal Broth is not very palatable; and as it does not contain the nutritious qualities of beef-tea or mutton-broth, it is scarcely advisable to introduce it into the sick-room, except for the sake of occasional variety.

Mutton Chops.—When a patient is so far convalescent as to require solids, a mutton chop, properly cooked, is generally most suitable. Broiling should be preferred to frying, and to cook mutton chops nicely a clear fire is absolutely necessary. The chops should be sprinkled with salt and pepper, dipped into a dish of oil, and placed over the fire for six or seven minutes. If fried a little more oil is requisite. They should not be pricked, but should be frequently turned to ensure their being thoroughly and slowly done through.

Farinaceous Food.—In all cases of fever, with consequent enfeebled digestion, and general weakness, it is desirable to rely mainly on farinaceous food. Even beef-tea is then sometimes too stimulating,

Oatmeal Porridge.—When properly made, this is both wholesome and nutritious, and especially suitable when a patient does not suffer from water-brash, acidity, or from any form of bowel irritation. It has long been the staple food of the Scotch, and produces good muscular fibre and strong bone. It is a very nourishing diet for growing children. Common

oatmeal is not equal to it; but it is not always easy to obtain the coarse Scotch. It should be prepared as follows:—Water should be boiled according to quantity required, adding a pinch of salt; while boiling, the meal should be allowed to drop in through the fingers, stirring the while with a wooden spoon; when enough is added, all should simmer for twenty minutes or longer, with an occasional stir.

Pearl Barley forms an excellent meal. It should be boiled for four hours, so tied in a cloth that room is left for the grain to swell. Only so much water should be added from time to time as to feed the barley and supply the waste of evaporation, lest the goodness of the barley should be boiled out. It may be served with milk, or (if the patient can digest them) with preserves or butter.

Rice is regarded with prejudice by many, perhaps because it is cheap. It is said, however, to be the chief food of nearly one third of the human race, and if taken with food which supplies the nitrogenous, fatty, and saline ingredients in which it is deficient, it is very valuable. It is easily digested, and is therefore very suitable for persons suffering from disorders of the alimentary canal, such as Diarrhœa or Dysentery. Pure rice is almost wholly assimilated; consequently it furnishes but little fæcal discharge. Prepared with milk, it is both wholesome and nourishing, It requires less time to prepare than barley—one hour is sufficient; but it may be cooked and served in the same way. *Old* rice is the best; and that imported from Carolina or Patna is to be preferred. Baked rice puddings form a pleasant variation. For these ground rice is preferable. The receipt used at Guy's Hospital is—Rice, 2½lbs.; milk, 6 quarts; sugar, 12oz.; butter, 1oz.; spice, 1 drachm; loss of water in cooking, say 37oz.

Macaroni Pudding.—Three ounces of macaroni should be soaked for forty minutes in cold water, well mashed, then added to a pint of boiling milk. This should be stirred occasionally, while it simmers for half an hour; then two eggs added, beaten up with a dessert-spoonful of sugar; also, if desired, a flavouring of lemon. This may then be baked in a pie-dish for twenty minutes. *Vermicelli* may be used instead of macaroni, but requires only twenty minutes' soaking.

Part of a *stale* loaf of bread,* boiled, and served with butter and salt, or with preserves, affords a change of wholesome food. Bread puddings made with eggs and milk, either boiled or baked, may be made according to the receipt used at Westminster Hospital: Bread, ¼lb.; milk, ¼ pint; sugar, ¼oz.; flour, ¼oz.; 1 egg for every 2lbs. Puddings made in the same way of stale sponge cakes, or rusks, diversify the diet.

There are many preparations of farinaceous foods. Some of them have acquired considerable reputation, and are really very excellent; some, on the other hand, are preparations of pulse, which are not adapted to weak digestion.

ARROW-ROOT.—The powder should be mixed with just sufficient cold water to make a thoroughly movable, smooth mixture, free from lumps. Milk, wine, brandy, beef-tea, or whatever is to be administered, should then be added, which being done, pour on quickly the proper quantity of *boiling* water, all the while stirring briskly. If a jug be used, the jug should be heated before the boiling water is put in, or it will cool the water. *Good* arrow-root is essential. It may be served as a jelly by proper manipulation, in which form it is sometimes preferable to the thinner preparation.

ARROW-ROOT, TAPIOCA, SAGO, JELLIES, etc., are, however, little more than vehicles for the administration of other things. In themselves they afford but little nourishment. If they be prepared with milk instead of water, wine should not be added. ISINGLASS, however, possesses considerable nutritive qualities. We have proved in many instances that the following makes a very *nutritive jelly*:—Isinglass, 1oz.; gum arabic, ½oz.; white sugar candy, 1oz.; port wine, 1 pint; ¼ nutmeg, grated. These should be put in a jar to stand twelve hours, covered tightly to prevent evaporation, then placed in a saucepan with sufficient water to simmer till the contents of the jar are quite melted; the whole should be stirred, then allowed to stand till cool. A teaspoonful occasionally is very reviving.

* It is of great importance, especially when children are concerned, that bread should be pure. The following is a simple test for *alum*, the most common adulterant. If alum be present, a heated knife plunged into the loaf, and allowed to remain till cool, will render its peculiar styptic sourness perceptible on placing the knife in the mouth.

Toast is rarely made well. Bread burnt on both surfaces, with the inside spongy, is unwholesome food. It should be of moderate thickness, slowly and thoroughly baked through, nicely browned on the outside—in short, not toasted too fast. Such toast is wholesome to eat or to soak in water.

Neave's Food.—Many years' experience in the use of Neave's Farinaceous Food justifies the recommendation of it as an excellent article of diet for infants, invalids, and persons of feeble digestion. Competent chemical analysts have found the preparation to contain every constituent necessary for the nourishment of the body; and this has been abundantly confirmed by what we have frequently observed as the result of its use. For infants it should be prepared according to the directions supplied with the food, taking care not to make it too thick; it also makes a very agreeable and highly nutritive *gruel*.

One precaution is necessary. Neave's food should be obtained *fresh* and in *good* condition; if exposed too long, it deteriorates. Under favourable circumstances, it keeps good for from six to twelve months, and may generally be procured in excellent condition from the leading homœopathic druggists.

Mellin's, Allen and Hanbury's, Savory and Moore's, Ridge's, and other foods, have their advantages, and are preferred by some patients. Those that are pure *starch*, as "corn-flours," so-called, and all those which thicken in like manner, contain but a small proportion of nutriment, being less sustaining, and also more difficult of digestion, than ordinary stale bread. For infants, and for children suffering from Diarrhœa, Indigestion, Constipation, Flatulence, Atrophy, or Aphthæ, they are very unsuitable. In all cases, foods which contain traces of bran, and also gluten, gum, sugar, cellulose, and saline matter — especially the phosphates — in proportion to the starch, are to be preferred.

Sugar-of-Milk.—A preparation of cows' milk and sugar-of-milk forms a still lighter food, and one which, in the case of very young infants, should be used to the exclusion of farinaceous food. Cows' milk may be assimilated to human by dilution with water and the addition of sugar-of-milk. Cows' milk contains more oil (*cream*) and caseine, or cheese-

matter, but less sugar, than women's. When necessary to bring up a child by hand from birth, sugar-of-milk is most suitable to commence with.

Formula.—One ounce of the sugar-of-milk should be dissolved in three-quarters of a pint of boiling-water, and mixed, as required, with an equal quantity of fresh cows' milk, and the infant fed with this from the feeding-bottle in the usual way. The bottle should be washed after feeding, and it and the teat kept in cold water until wanted again.

It is important to use only cows' milk of a good quality, and always to administer it at the same temperature as that of breast-milk (see *The Diseases of Infants and Children*, by the Author). After the fourth or sixth month, some Farinaceous Food is generally more suitable.

27.—Sick-room Dietaries in Public Institutions.

FULL OR EXTRA DIET.

Breakfast.—Tea, with new milk and sugar, 1 pint; bread and butter.*

Dinner.—Meat, roast or boiled, alternately, ½lb. after being dressed and free from bone. Broth, ½ pint on days when boiled meat is given. Potatoes, or fresh vegetables, ½lb. Rice, or bread-and-butter pudding, ½lb. three times a week. Bread. Beer,† men, 1 pint; women, ½ pint.

Tea.—Same as breakfast.

Supper.—Bread and butter. Beer,† men, 1 pint; women, ½ pint. Or, broth instead of beer.

Daily Allowance.—Tea, 2 pints. New milk, ½ pint. Beer† (porter or ale), 2 pints for men, 1 pint for women. Meat, ½lb. Vegetables, ½lb. Bread, 14oz.; butter, 1oz. Porridge, gruel, barley-water, or milk in forenoon, or as ordered.

* The occasional addition of marmalade, watercress, lettuce, or other vegetable or fruit in season, to the bread and butter, is a great improvement. So is the substitution of cocoa for tea.

† Beer is often better omitted.

Middle or Ordinary Diet.

Breakfast.—Tea, with new milk and sugar, 1 pint. Bread and butter.*

Dinner.—Meat, roast or boiled, alternately, ¼lb. after being dressed and free from bone. Broth, ½ pint, on days when boiled meat is given. Potatoes, or fresh vegetables, ½lb. Rice, or bread-and-butter pudding, ½lb., three times a week. Bread. Beer,† men, 1 pint; women, ½ pint.

Tea.—Same as breakfast.

Supper.—Bread and butter.* Beer,† men, ½ pint; women, ½ pint. Or, broth or gruel, instead of beer.

Daily Allowance.—Tea, 2 pints. New milk, ½ pint. Beer,† (porter or ale), 1 pint. Meat ¼lb. Vegetables, ½lb. Bread, 12oz.; butter, ¾oz. Porridge, gruel, barley-water, or milk in forenoon, or as ordered.

Broth Diet.

Breakfast.—Tea, with new milk and sugar, 1 pint. Bread and butter.*

Dinner.—Broth, 1½ pints. Potatoes, mashed, 6oz. Bread.

Tea.—Same as breakfast.

Supper.—Bread and butter. Gruel, 1 pint.

Daily Allowance.—Tea, 2 pints. Broth, 1½ pints (¼lb. neck of mutton with bone to 1 pint water). Potatoes, 6oz. Butter, ¾oz. Gruel, 1 pint.

Milk Diet.

Breakfast.—Tea, with new milk and sugar, 1 pint. Bread and butter.

Dinner.—Milk, 1½ pints; or milk, 1 pint, with boiled rice, sago, or arrowroot; or, beef-tea, ½ pint, when ordered.

Tea.—Same as breakfast.

Supper.—Bread and butter. Gruel, 1 pint.

Daily Allowance.—Tea, 2 pints. New milk, 2 pints; or 1½ pints with rice, etc. Bread, 12oz.; butter, ¾oz. Gruel, 1 pint. Gruel and barley-water as ordered.

* The occasional addition of marmalade, watercress, lettuce, or other vegetable or fruit in season, to the bread and butter, is a great improvement. So is the substitution of cocoa for tea. † Beer is often better omitted.

Low Diet.

Breakfast.—Tea, with new milk and sugar, 1 pint. Bread, 3oz.

Dinner.—Gruel, 1 pint. Bread, 2oz.

Tea.—Same as breakfast.

Supper.—Gruel, 1 pint.

Children's Diet (under 10 years of age)—Ordinary.

Breakfast.—New milk, ¾ pint. Bread and butter.

Dinner.—Mutton or beef (not salted) roast or boiled, alternately, 2oz., after being dressed, and free from bone. Broth, ¼ pint on days when boiled meat is given. Potatoes, or fresh vegetables, ¼lb. Rice, or bread-and-butter pudding, 6oz. Bread.

Tea.—Same as breakfast.

Daily Allowance.—New milk, 1½ pints. Meat, 2oz. Vegetables, ¼lb. Bread, 12oz. Butter, ¾oz. Pudding, 6oz.

Children's Diet (under 10 years of age)—Milk.

Daily Allowance.—New milk, 1½ pints. Bread, 8oz.; butter, ½oz. Rice or bread-and-butter pudding, 6oz.

Extras.—Mutton chops, beef steaks, fish, poultry, game, beef-tea, eggs, puddings, jellies, custards, lemonade, watercresses, beer, wine or spirits, to be specially ordered.

Recipes.

Rice Pudding.—Rice, ½lb.; milk, 1 quart; sugar, 2oz.; butter, ¼oz.

Batter Pudding.—Flour, 6oz.; sugar, 2oz.; eggs, 4; milk, sufficient to make up 1 quart.

Light Pudding.—Flour, 1½oz.; sugar, 2oz.; eggs, 6; milk, sufficient to make up 1 quart.

Bread Pudding.—Bread, 4oz.; milk, ¼ pint; flour, ¼oz.; 1 egg.

Macaroni Pudding.—Macaroni, 3oz.; milk, 1 pint; sugar, ¼oz.; 2 eggs.

Beef Broth.—6 pints: Beef, without bone, 4lbs.; barley, ½lb.; oatmeal, 2oz.; parsley, 1oz.; thyme, ¼oz.; onion or leek, ½lb.; pepper and salt to taste

Gruel.—6 pints: Oatmeal, 12oz.; sugar, 3oz.; ginger to flavour; steep the meal over night, boil for two hours.

28.—Demulcent Beverages, etc.

Barley-Water.—Wash a table-spoonful of pearl-barley in cold-water; then pour off the water and add to the barley two or three lumps of sugar, the rind of one lemon, and the juice of half a lemon; pour on the whole a quart of boiling water, and let it stand covered and warm for two or three hours; then strain it. Instead of lemon, currant-jelly, orange-juice, or sliced liquorice may be used to flavour. Barley-water is a valuable demulcent in colds, affections of the chest, Hectic fever, etc. It is also useful in *Strangury* and other diseases of the bladder and urinary organs.

Gum-Water.—Gum is a mild nutritive substance, less stimulating than most other forms of nourishment. On this account it is admirably adapted for use in inflammation of the mucous membranes generally, as in Catarrh, Bronchitis, etc. *Gum-Water* is prepared by dissolving one ounce of clean gum-arabic, and half an ounce, or less, of white loaf-sugar, in one pint of hot water. Lemon peel may be added for flavour.

Linseed-Tea.—This is often a useful beverage for soothing irritation arising from Cough, Catarrh, Consumption, Pneumonia, Diarrhœa, Dysentery, Inflammation of the bowels, Leucorrhœa, Gonorrhœa, difficult micturition, and other inflammatory diseases. It is prepared by adding one ounce of bruised linseed, and half an ounce of sliced liquorice-root, to two pints of boiling water, and macerating in a covered vessel near the fire for two or three hours; it should then be strained through a piece of muslin, and one or two table-spoonfuls taken as often as necessary. Sliced lemon and sugar-candy will make it more palatable.

Rice-Water is very valuable in Diarrhœa and Dysentery. The best Carolina or Patna rice should be washed with cold water, then boiled in a good measure of water for ten minutes, the water strained off, and more added; and so on till the

goodness is boiled out of the rice. The water is ready to drink when cold. Cream may be added if there be not high fever: a pinch of salt also, if desired, or flavouring as for barley-water.

Toast-Water is not often well made. A slice of stale bread (crust is better) should be slowly baked through (not burnt), then put in a jug with a quart of boiling water poured over it, and allowed to stand covered till cool. It may be flavoured with lemon peel.

Barley-Water, *Gum-Water*, *Rice-Water*, *Toast-Water*, and *Linseed-Tea*, are more or less useful in similar conditions, the one being substituted for the other to make a variety.

Lemonade.—A lemon should be cut into slices, and put into a jug with several pieces of loaf-sugar. A pint of boiling water added, covered, and allowed to cool. After straining, it is fit for use. This beverage is recommended to allay thirst, irritation of the throat, etc.

Nitric Lemonade.—Twenty to thirty drops of *dilute nitric acid* should be added to eight ounces of pure cold water, and flavoured with honey or loaf-sugar; from a teaspoonful to a table-spoonful, according to age, may be given two or three times daily. Nitric Lemonade modifies sickness in Hooping-cough, and is remedial in Asthma, Bronchitis, Consumption, loss of blood from the bowels, fœtor of the skin or urine, cold feet, night-sweats, etc.

Sweets.—It should be remembered by those who provide the diet of invalids, that they soon tire of *sweets*. A perpetual round of sweetened drinks, jellies, etc., soon palls upon the appetite, whilst something *savoury* is grateful to the palate.

Fruits.—Ripe fruits in season are often palatable and refreshing to an invalid, and need rarely to be withheld if well cooked, even in acute forms of stomach disorder. In all cases, whether cooked or not, the skins and seeds should not be swallowed. Oranges, grapes, and strawberries stand first for delicacy and wholesomeness. Apples, pears, peaches, nectarines, etc., stewed, baked (not burnt), or boiled, may be served with sugar or syrup. Gooseberries, currants, and raspberries may be taken in moderation, but plums are rarely suitable.

Fruit syrups, mixed with water, make an agreeable drink in hot weather, or during fever. The proportion should be one or two dessert-spoonfuls to a tumblerful of cold filtered water. Marmalade is generally acceptable.

29.—Cod-Liver Oil.

The value of this agent in the treatment of many constitutional diseases is amply confirmed by long experience. The Germans were earlier acquainted with its nutritive powers than ourselves, and it was from observing its favourable effects in apparently hopeless cases of Consumption in the hospitals of Heidelberg and Berlin that Dr. Bennett introduced it to public notice in 1841. After extensive trial, its efficacy was confirmed by a publication from the pen of Dr. Williams in 1849, and in the report of the Brompton Consumption Hospital for 1851. It should be regarded as food rather than medicine, although the minute amount of *Iodine* and *Phosphorus* it contains may account for its curative virtues in many cases in which cod-liver oil has been the only remedy given.

Without fully entering into an enumeration of the complaints in which cod-liver oil is of service—which we propose doing in the following pages—we would here state briefly that it is specially valuable in the various forms of *Scrofula*—chronic discharge from the ears, strumous Ophthalmia, enlargement of the glands, strumous disease of the bones, strumous Abscesses, etc., and, in short, in all diseases which require fatty substances as food, and *Iodine* as a remedy. Its assimilation is promoted, and its beneficial action greatly enhanced, by the addition of ten drops of the first dilution of *Iodium* to each pint of the oil. This addition is especially recommended in Phthisis Pulmonalis and Atrophy.

In the treatment of *Consumption* it stands pre-eminent, by almost universal consent; when given in suitable cases, its power in checking emaciation and raising the tone of the muscular structures is well known.

The value of cod-liver oil is often very marked in the

sequelæ of many acute diseases or inflammations occurring in middle-aged and in old persons, in whom the reparative powers are less active than in children; also in the after-effects of acute fevers in children who have suffered, previous to such attacks, from impoverished health, Scrofula, etc.,—as chronic discharges from the ears and nose after Scarlet fever and Measles; and in the after-stages of Hooping-cough. Rickets, Chorea, etc., are generally much benefited by the administration of cod-liver oil. Chronic Rheumatism and Gout, chronic Bronchitis, chronic skin diseases, and the degenerative diseases of the aged, are all more or less modified by the employment of this agent.

All nourishment should contain, in certain proportions, albuminous, fatty, and mineral principles, from which the chyle, a molecular fluid, and that which supplies the blood, is produced by digestion. Sometimes, chylification being imperfect, there is a deficient assimilation of these fatty constituents, when the blood becomes too albuminous, and engenders tubercle if exuded into the lungs. The administration of a pure animal oil is in such cases beneficial; as the fluid fat, being already separated from the solid food, makes less demand upon the digestive organs, but is easily received into the system, first enriching the chyle, of which fat and albumen are the essential molecular basis, and through it the blood. Inherent debility is often indicated by a distaste for fat, and Phthisis as often arises from a loss of the power to assimilate it. On the other hand, fat is required to renew the strong muscles and firm tissues of the labouring man, who is led instinctively, by the cravings of nature, to demand it.

Caution.—Cod-liver oil should not be administered indiscriminately. It is generally inadmissible during the persistence of acute febrile symptoms, congestion, hæmoptysis, or any active form of disease; digestion being then impaired, and the mucous membrane irritable, the oil is only likely to increase the disorder. The sphere of cod-liver oil is to remove exhaustion and impart general tone; this is best accomplished when active morbid processes and local irritation have subsided; for then the system is in a condition to appropriate a larger amount of nourishment.

Some caution is also necessary to be observed in the administration of oil to obviate nausea or eructations. Such effects generally result from the quantity or quality of the oil. The large quantity of oil taken in some cases occasions disorder of the digestive mucous membrane, or causes it to pass off with the evacuations. The appearance of any oil unchanged in the evacuations is a sign that the quantity given is too large to be digested. We generally recommend it, at first, in teaspoonful doses, twice a day, with, or immediately after, food; if the stomach be intolerant of it, a teaspoonful, or for young children ten or twelve drops, once a day. If there be still difficulty in retaining the oil, we prescribe it at bed-time, just as the patient is lying down to sleep. In cases of extreme irritability of the stomach, cod-liver oil may be introduced into the system by inunction; a considerable amount of friction, as much as the patient can bear, facilitates absorption.

The disagreeable effects of oil, and the repugnance felt towards it, have often been created by inferior and disgusting preparations, and we fully endorse the statement that to find the easiest digested and assimilated oil is one of the main problems in the cure of Consumption. Probably the best method of rendering the oil palatable is to have it made up in bread, as it is then scarcely tasted. The proper proportion is two to four tablespoonfuls of the oil to one pound of dough. Patients to whom we have recommended this method of taking the oil, assure us that while pleasant and digestible, it is as efficacious taken in this as in any other way.

Claret is another vehicle for cod-liver oil. The oil should be poured upon the wine, so that it does not touch the glass, but floats as a large globule; in this way it may be swallowed untasted. A few morsels of agreeable food should then be eaten. Small pieces of ice in each dose of oil also render it almost tasteless. Another plan to obviate taste and nausea is to take a pinch of salt immediately before and after the oil. Sometimes heating the oil is a good plan, as it renders it more fluid, and less liable to disagree with the patient. It is also beneficial to omit taking it for a day or two occasionally. The glass should be carefully washed after use, and the oil kept in a cool place, or in a refrigerator. Many preparations of

cod-liver oil are now to be obtained of the chemists which effectually conceal its disagreeable qualities, and render it more easy of digestion.

30.—Glycerine.*

Glycerine, or glycerine of starch (see Formulæ, Part VI.), is of great use as an external application, when the lips or hands are chapped, or when the skin is left rough and inelastic, as after Eczema and other skin complaints. It quickly gives suppleness to the tissues, and removes burning, tingling, or smarting. Glycerine should be mixed with an equal quantity of water, or, still better, of Eau-de-Cologne, as without such dilution smarting may be set up, or even inflammation of the tissues;—a result due no doubt to the affinity of glycerine for water, which it abstracts so rapidly from the skin that a burning sensation is produced. The glycerine of starch may also be used in Xeroderma to make the skin soft and supple. The application should be made daily, after a bath, when the body is wiped thoroughly dry. Glycerine may be advantageously applied to the meatus of the ear, when the tissues are dry, or when the tympanum is ruptured. In the latter instance it covers the opening, and so, for a time, supplies the place of the lost membrane. In acute diseases, when the lips, tongue, and gums become dry and coated with dried mucus, these parts should be washed quite clean, and kept moist by glycerine and water. This adds much to the comfort of the patient, and also improves his appearance.

In the last stage of chronic diseases, as Phthisis, the tongue and inside of the cheek become dry, red, and glazed, and there is often great thirst. These discomforts may be lessened or removed by washing the mouth with glycerine and water, but glycerine alone would be liable to make the mouth clammy. If Thrush have attacked the mucous membrane in the above-mentioned disease, the vesicles may be removed by the employment of glycerine.

Glycerine and carbolic acid may be applied with advantage

* Chiefly from Ringer's Therapeutics.

to fœtid sores, such as open Cancer, whether on the surface of the body or in the uterus. It removes the offensive smell of the discharge, and also improves the condition of the sore. Probably this preparation would be of use in Lister's method of treating wounds.

Glycerine and borax form a good application to Pityriasis of the scalp.

We consider glycerine, or glycerine cream, one of the best preventives of bed-sores. The part exposed to pressure should, if possible, be washed every morning and evening with tepid water, and carefully wiped quite dry with a soft towel, and then a little glycerine, or glycerine cream, rubbed gently over the part with the hand. If the part be at all sore or tender, the latter is best. Glycerine should, however, be used before any redness or tenderness occurs, as its action is preventive rather than curative.

Glycerine is sometimes administered internally, as a substitute for Cod-liver oil; but as a therapeutic agent it is decidedly inferior.

31.—Ice.

Ice is a valuable therapeutic agent, and is now extensively used both internally and externally, chiefly to check hæmorrhage, to moderate inflammation, and to soothe the uneasy sensations in febrile and other disorders.

In *Inflammation of the Brain* or its membranes, and in the *severe headache* of the early stages of acute fevers, it is most useful, applied in small pieces, enclosed in a bladder or india-rubber bag, in the form of a cap fitted to the head.

To relieve the severe *pain* and *vomiting* in cases of *Ulcer* or *Cancer* of the stomach, a bag containing small fragments of ice should be laid on the epigastrium.

In *Inflammation of the Tonsils*, the *Sore-throat* of Scarlatina and other acute specific fevers, and in *Diphtheria*, the use of ice relieves pain and arrests inflammation. Ice also checks the secretions from the throat, and so obviates frequent painful efforts to detach the mucus from the crypts and follicles of the

tonsils. For these purposes suitable pieces should be sucked repeatedly.

In *hæmorrhages*, ice is extremely valuable. In *bleeding* from the *mouth*, *throat*, or *nostrils*, ice, applied directly to the bleeding vessels or to the surface, forms an efficient styptic. When hæmorrhage comes from the *stomach* or *lungs*, ice should be repeatedly *swallowed* in small pieces, for so taken direct, or reflex, it helps to contract the leaking blood-vessels.

To arrest *uterine hæmorrhage*, by promoting firm contraction of that organ, ice should be swallowed freely; at the same time, a piece of ice should be inserted high up the vagina, and, if necessary, a piece may also be introduced into the rectum.

To allay *local inflammation* or check hæmorrhages from the surface, ice, broken into small pieces, should be enclosed in a bladder or thin india-rubber bag. When one-third filled, the air should be squeezed out of the bag, which should then be tied at its mouth, on an inserted cork, so large and long as to bear the tight pressure of the twine. The bag may then be made into almost any shape, and fitted to the irregularities of the body (*Ringer*). (See Section on Compresses.) Other uses of ice, as a therapeutic agent, are suggested in the various Sections of Part III.

CAUTIONS.—Ice is contra-indicated in conditions such as the following:—*Old age*, especially in feeble patients; *Apoplexy* and *Coma*, in persons with a feeble pulse; *advanced* stages of disease; *extreme feebleness*. In such cases, the great sedative power of ice might overwhelm the patient, and stop the action of the enfeebled heart. It is also advisable to avoid too great a shock to the system in any case.

32.—Warm and other Baths.*

WARM BATH.—The temperature of the bath must be raised to about 98° Fahr., or to what is agreeable to the back of the

* For the correct or safe administration of warm baths, a bath-thermometer is indispensable, the hand being a very imperfect guide. In default of a thermometer, the nurse should uncover her arm to the elbow, and immerse it in the water, as the skin of the elbow is thin and sensitive to any excessive degree of heat.

hand; then the patient should be immersed up to his neck, and a cold wet towel or large sponge applied to the head (for about three minutes only); he should remain in the bath for five, ten, or twelve minutes, but not long enough to allow the stimulating effect to pass off; otherwise it would prove reactionary and depressing. If the sight of the water make a child afraid, it should be concealed by means of a blanket spread over the bath, upon which the child should be placed and gently let down into the water, even with its dress on, if necessary to remove fear. The temperature should be *fully maintained* by additions of hot water carefully poured down the side of the bath till the patient comes out. The bath should be given in front of a good fire, and a warm blanket be in readiness to wrap the patient in directly he steps out of the water.

The warm bath (92° to 98° F.) and the hot bath (98° to 112° F.) are remedial agents of great value in many affections. They are used to soothe the nervous system, to control the action of the heart, to promote perspiration, to relax the muscular and cutaneous systems, and especially to equalise the temperature by effecting a uniform distribution of blood throughout the body. In the latter instance a disproportionate quantity of blood in the internal organs is recalled to the surface, and free circulation promoted.

The warm bath is often of signal benefit in the diseases of children—*Convulsions*, *Spasmodic Croup*, *Measles*, *Scarlatina*, etc.; also in *Scarlatinal Dropsy*, as well as in other dropsical affections. In the fevers of children, it calms the nervous excitement, and is often followed by refreshing sleep.

It also aids the cure in inflammation of the kidneys, bladder, and uterus; at the grand climacteric a general warm bath, for forty or fifty minutes, once a week, cures or prevents many of the ailments incident to that period, by promoting free action of the skin. In spasmodic stricture of the urethra; in the passage of renal and biliary calculi; in many spasmodic affections of the bowels—*Colic*, etc.; in *Prurigo*, *Tetanus*, *Diabetes*, *Bright's disease*, and in the *Melancholy of Insanity*, it is often of signal service.

The Vapour Bath.—This has a similar action, and is ap-

plicable to most of the cases mentioned under the "warm bath," but is more particularly useful for adults in some forms of Rheumatism, and dry scaly diseases of the skin. The patient being seated, undressed, upon a cane-bottomed chair, a jupon or crinoline should be placed over the shoulders, and tied round the neck. Blankets should then be secured outside this, completely covering it from top to bottom so as to retain the steam, which may be obtained by placing a pail of boiling water under the chair. Steam may be reproduced freely after it has ceased to be evolved, by gradually immersing in the water a red-hot brick or piece of iron, such as the heater of a tea-urn. During the bath, one or two tumblers of cold water should be taken by sips. To prevent headache the forehead should be bathed with a sponge dipped in cold water, or a napkin wrung out of cold water laid on the head. It may be necessary, also, to put the feet into a pan of moderately hot water, the heat of which should be maintained by adding, after a few minutes, more hot water. After the patient has perspired for ten or fifteen minutes, he should be *quickly* washed with tepid water, dried, and at once retire to bed; or he may sit in a *shallow bath* at a temperature from 60° to 80° Fahr., the extremities and trunk being well rubbed by an assistant, and water gently poured over the head for three or four minutes.

Care should be taken that the surface of the steaming water is not too near the seat of the chair, as the patient would be scalded if the steam were directed immediately upon a limited portion of the body. Indeed, fatal results have occurred through carelessness on this point.

The Hot-air Bath.—In this bath a spirit-lamp or a saucer containing one or two ounces of ignited spirits-of-wine or rectified spirits-of-naphtha is substituted for the hot water of the vapour bath, but the blankets are used in the same manner. This also may be followed by the tepid wash or shallow bath. As the spirit burns, heat is generated around the patient, and perspiration produced. If a saucer be used, and it be necessary to prolong the perspiration, a larger quantity of spirit will be needed, but no addition should be made after the spirit has been lighted.

The Hot Foot-Bath.—Immediately before retiring to bed the patient should be undressed, but well covered with one or two blankets, which should also cover the foot-bath, so that the steam may have access to the body generally; the feet and part of the legs should then be put into hot water (98° F.), and the temperature afterwards increased by fresh additions, for ten, fifteen, or twenty minutes, according to the strength of the patient, and until free perspiration breaks out on the face. Except for sensitive patients, mustard may be added to the bath with advantage. The patient should then be rapidly washed with tepid water, rubbed dry, got into bed, and well covered with clothes. Perspiration should be further encouraged by drinking cold water. On rising in the morning, if sufficiently recovered, he should take a cold plunge- or shower-bath, or quickly sponge over the whole surface of the body, after which he should be vigorously dried by means of a large bath-sheet. This local warm bath is used for a variety of purposes, and if adopted early, and carried out according to the foregoing directions, will promote general perspiration, and arrest or relieve *Catarrh, fever*, etc., in the incipient stage.

The *hot foot-bath* or the *hot sitz-bath* is useful in sudden suppression of the menses during the flow, from exposure to cold or wet; it relieves the distressing sensations of the patient, and aids the return of the function. It is also of service in inflammation of the womb, and in *painful* menstruation. Headache, palpitation, the hysteric sensation of choking, Piles, etc., are likewise removed or relieved by a local warm bath.

The Blanket Bath.—This is an easy method of inducing perspiration. A blanket should be wrung out of hot water, and wrapped round the patient. He should then be packed in three or four dry blankets, and allowed to repose for thirty minutes. Afterwards the coverings may be taken off, the surface of the body rubbed with warm towels, and the patient made comfortable in bed.

Cold Sitz Baths.—This form of bath is very valuable in various functional derangements of the utero-genital system, and pre-eminently so in *Amenorrhœa*, but should not be used when there is reason to suspect that the suppressed or imper-

fectly performed function is the result of constitutional disease, or when the patient is very feeble and anæmic.

The patient should sit at bedtime in a hip-bath, with water at about 58° or 60° Fahr., sufficient to cover the hips; the legs and feet should not be immersed, but kept warm by means of flannel wraps or a hot foot-bath, the shoulders also being well covered. The time may be gradually increased from five to fifteen minutes, as the patient can bear it. After the bath, she should be well rubbed with a large bath-sheet or coarse towel till warm, and then instantly retire to bed. If chilly, a hot-water bottle should be applied to the feet. But permanent discomfort would indicate the desirability of discontinuing, or of making a very limited use of, this bath. In suitable cases, the treatment may be continued every night for a week or two, or even longer.

The Wet-Pack.—A macintosh sheet, thin oil cloth, or stout blanket or quilt, should be spread on a mattress, and over it a thick linen sheet, *well wrung* out of *cold* water. In fevers, the colder the water is the better; for delicate persons with feeble reaction, water at 68° may be used. The patient is to be extended on his back naked on the wet sheet, so that the upper edge covers the back of the neck, but the lower one is to project beyond the feet; holding up the arms, one side of the sheet is to be thrown over the body and tucked in; the arms are now placed by the sides, and the other part of the wet sheet is thrown over all, and tucked rather tightly in, turning in the projecting ends under the feet. The macintosh or blanket is then to be brought over all the sheet, and well tucked in around the neck, at the sides, and over the feet, so as completely to exclude the air. A stout quilt or extra blanket is to be put over all. In a short time, the patient will become warm: the sensation is most agreeable, especially in fevers. He may remain in the pack for thirty, forty, or fifty minutes, the duration being regulated by the effects produced, and should then be put into a shallow bath at 64°, well washed, dried, and put to bed. It may be repeated once, twice, or thrice a day, according to circumstances and the violence of the attack. Taking sips of cold water will encourage perspiration. If the head become congested, or the

face flushed, while in the pack, a cold compress should be applied over the forehead for a few minutes. By attention to the above directions, almost any person can carry out the treatment. The pack, or rather the evaporation of the water in the sheet, promotes the removal of excess of heat by largely augmenting the exhalent action of the skin. There is no danger of internal mischief arising, for the tendency of the pack is to divert the circulation from the central organs, and to maintain it in vigour on the extensive surface of the body. The wet-pack is invaluable in the *early* stages of all fevers; and in *Scarlatina*, *Measles*, *Small-pox*, etc., it assists in bringing out the eruption, and should be used at the commencement and throughout the course of these diseases. As objection is often raised by the patient's friends to *cold* packing, on the ground that it is likely "to throw the fever inwards," the sheet may be dipped in warm water, and by the time it is arranged for the reception of the patient, it will be sufficiently cool to answer the purpose.

*** For suggestions on Bathing as a hygienic measure, see Sec. 13.

33.—Wet Compresses.

A cold compress consists of two or three folds of soft linen, wrung out of cold water, applied to the affected part, and covered by a piece of oiled silk, gutta-percha-foil, or india-rubber-cloth, which should project a little beyond the wet cloth on all sides, so as to prevent evaporation from the linen. In parts subject to considerable motion, as the throat and neck, the edges of the oiled silk should be folded in over the wet linen, so as to prevent its exposure to the air. For persons with feeble reaction, the compress may be held for a minute in front of a fire before applying it.

Compresses are generally best applied at night, as it is often impossible to keep them in *close apposition* while moving about. After removing them in the morning, the parts should be sponged with cold water to restore the tone of the skin.

Abdominal Compress.—This consists of two or three thick-

nesses of linen from about six to nine inches wide, and long enough to go round the whole body, or the linen may only cover the front part of the abdomen, or even only the seat of uneasiness; this should be wrung out of cold water, covered with oiled silk, and secured by a flannel or linen roller with strings, to keep it in position. It may be worn several nights in succession, the parts being well sponged with cold water and rubbed with a coarse towel on removing it in the morning. The abdominal compress is very valuable in Typhoid fever, controlling Diarrhœa, checking the speed of ulceration, and so lessening the danger of perforation. In Constipation, it is often a most useful adjunct to our medicines; in Diarrhœa, it relieves irritation and facilitates the cure. The abdominal compress is also very beneficial in uterine disease, and ovarian congestion or irritation, when it is usually applied by dipping in tepid water one-third of a calico bandage three yards long and half a yard wide; the wet end is applied around the pelvis and the dry part rolled outside it so as to protect the clothing and sheets from wet. Sufficient calico to wrap once round the pelvis, covered with oiled silk or thin gutta-percha, is a more convenient mode of application.

Compress for the Throat.—A piece of linen or flannel should be wrung out of cold water, and wrapped in two or three thicknesses round the throat; this should be covered with oiled silk, and, over all, two or three thicknesses of flannel to maintain the warmth. When it is applied, the patient should retire to bed, and he will generally have the satisfaction of finding his throat-difficulty much relieved by the morning.

Chest Compresses.—In Bronchitis and other inflammatory affections of the lungs or pleura, the use of wet compresses, after or before poultices, greatly aids the action of the medicines. Compresses adapted for the chest and other parts may be obtained from most homœopathic chemists.

Sores, Ulcers, and Tumours are often benefited by compresses; in local forms of Rheumatism, as Lumbago; some inflammatory affections of the knees, ankles, and other joints; and in Sprains and other injuries, they hasten the cure.

The appearance of a rash or eruption of pimples after the

continued use of the compress is regarded as favourable. If the rash be very troublesome, the compress may be discontinued, and glycerine and Eau-de-Cologne, in equal parts, smeared over the eruption.

Spinal Hot-Water and Ice Bags.—In many female derangements, Chapman's spinal bags are of great utility, when judiciously used. In conjunction with appropriate remedies, the spinal hot-water bag is of great advantage in Menorrhagia, Dysmenorrhœa, and also for the relief of pelvic distress arising during the course of uterine or ovarian disease. In many cases of profuse menstruation, especially in patients of relaxed muscular tissue, or in those suffering from the effects of imperfect involution of the uterus, the application of a ten-inch spinal bag, filled with water of the temperature of about 110° Fahr., to the lower part of the spine, is a powerful help in arresting the excessive loss. The bag should be worn for not less than two hours at a time. In cases of Dysmenorrhœa, especially if they are of inflammatory or congestive origin, suffering is often greatly mitigated by wearing the hot-water spinal bag for two hours at a time at intervals through the day. It is equally applicable and beneficial to patients with pain in the back, above the pubes, over the ovaries, or along the margin of the false ribs, in ovarian or uterine disease. "The treatment of uterine diseases by the application of cold to the spine, best effected by means of Chapman's ice-bags, requires to be carried out with greater caution than does that by means of the spinal hot-water bag. The latter, injudiciously applied, may aggravate suffering or be altogether useless, but is not likely to be decidedly injurious. The ice-bag, however, may without doubt, if used in unsuitable cases, prove exceedingly so. The ice-bag is useful, 1st, In certain cases of Amenorrhœa in which the cold hip-bath is not suitable; 2ndly, In relieving the sickness of pregnancy; 3rdly, In certain forms of disease in which severe pelvic and lumbar pains are experienced, together with, and apparently depending on, the condition known as Spinal Irritation" (*Dr. L. Atthill*). It should, in the first instance, be used only fifteen minutes at a time. If well borne, its application should be prolonged, but it is better to carry out this treatment by repeated applications of the ice-

bag made at intervals of some hours than by prolonged applications made once or twice a day. In pregnancy, great caution is necessary, when only a moderate use of the ice-bag is recommended.

34.—Poultices.*

Poultices or cataplasms are recommended on account of the warmth and moisture they convey, and are applied when the skin, or an underlying structure, is inflamed. They mitigate pain by relaxing tension and promoting perspiration. Poultices may be made as follows :—

Linseed-meal Poultices.—Boiling water should be poured into a heated bowl, and into this the meal quickly sprinkled with one hand, while the mixture is constantly stirred by means of a knife or spatula with the other, till a thin smooth dough is formed. If the water be added to the meal, little knots are apt to collect. The dough should be quickly spread on warmed linen already cut to the required shape, or put into a bag, and applied. Linseed-meal retains heat and moisture for a long time, but is liable to irritate a delicate or inflamed skin.

Bread Poultices.—Put slices of bread into a basin, pour over them boiling water, and place by the fire for a few minutes, when the water should be poured off, replaced by fresh boiling water, and this again poured off, and the bread pressed, beaten with a fork, and made into a poultice. Bread poultices are valuable for their bland, non-irritating properties.

Charcoal Poultices.—Mix charcoal uniformly with bread for a poultice, and just before application sprinkle the surface with a layer of charcoal. Or charcoal may be sprinkled on a wound or ulcer, and a simple bread poultice applied over it. Charcoal poultices correct offensive smells from foul sores, and favour a healthier action.

Carrot Poultices.—Boil carrots quite soft, mash them with a fork, and apply in the ordinary way. They are said to make wounds cleaner and healthier.

* For this and the following section the author is much indebted to Ringer's Therapeutics.

Poultices are chiefly used in the following complaints :— Pneumonia, Pleurisy, Bronchitis, Pericarditis, Peritonitis, Acute Rheumatism, Lumbago, and to mature and facilitate the discharge of matter in Abscesses, Boils, etc.

When used to mature Abscesses or disperse inflammation, poultices should extend beyond the limits of the inflamed tissue, but after the discharge they should be very little larger than the opening through which the matter is escaping. If continued too long, large poultices irritate, sodden the parts, and may develop fresh boils around old ones.

In Pneumonia and all deep-seated inflammations, they should be renewed as soon as they become cool, and the one not disturbed till another is ready to replace it. In Bronchitis and Pneumonia, a *jacket-poultice*, to go round the chest, with tapes to secure it in front and over each shoulder, is necessary to ensure uniform and efficient action.

To retain heat for a long time, poultices should be covered with oiled silk, or with a layer of cotton wool. One of these methods is preferable to a very thick poultice, which might cause inconvenience or pain.

In acute Lumbago, they must be applied thick, hot, large enough to cover the affected part, and be renewed immediately they become cool. After continuing this treatment from one to three hours, the skin should be wiped dry and covered with flannel, and this again with oiled silk. Like the poultice, this last application promotes free secretion from the skin, to which the good results are mainly due.

As a substitute for a poultice, *Spongio-piline* may sometimes be used. It is made of sponge and wood felted together in three layers, and coated on one of its surfaces with an impermeable substance. By moistening the soft inner surface with water, the warmth and moisture of the ordinary cataplasm are secured ; or by sprinkling the same surface with lotions, it may be made the vehicle for various medicinal substances. *Spongio-piline* is often valuable during the formation of Abscesses or irritable sores, and especially so when required for persons pursuing their usual occupations. But for the relief of severe pain, a large hot poultice is more soothing. Poultices should be continued till pain has subsided, or the sore begun to granulate;

afterwards a wet compress, covered with oiled silk, should be applied.

DRY DRESSINGS.—As warmth and moisture favour the decomposition of discharges from wounds, and thus prevent healthy granulation and union, dry dressings have been recommended. Layers of cotton wool and lint exclude air, moisture, and infecting germs, prevent decomposition and promote healthy action. Blood is the best of all lotions, and, when dry and undisturbed, is protective to the healing processes going on. If the edges of wounds are brought and kept together, all foreign particles having been removed, they may often be allowed to heal without any assistance beyond the additional protection and support of light rollers of lint.

35.—Fomentations.

Fomentations, by means of flannel wrung out of hot or boiling water, are employed for purposes similar to poultices, but being lighter are less liable to increase the pain of sensitive parts. The hot flannel is placed in stout towelling, and twisted round till as much water as possible is squeezed out. If well wrung, it may be applied very hot without any danger of scalding the skin.

Fomentations with hot water, often valuable adjuncts to poultices, are useful in *relieving pain*, *arresting inflammation*, and checking the formation of matter. *Acne indurata* and similar *inflamed pimples* can often be dispersed or reduced in size by them. Conjoined with poultices, they expedite the passage of matter to the surface, and favour its subsequent expulsion. In such cases the value of fomentations and poultices depends upon the heat and moisture; water for the fomentations should therefore be used *hot*, and fresh additions of hot water added as it becomes cool. After well fomenting, poultices should be applied as hot as possible, and frequently renewed.

In Inflammations, Spasms, and pains affecting deeply-seated structures, as in the chest or abdomen, great and quick relief often follows hot fomentation.

DRY FOMENTATIONS.—When heat alone is required, and it

is desired to avoid the relaxation of tissues which moisture would occasion, *dry* heated substances—flannel, bran, chamomile flowers, salt, sand, etc., are used. After thoroughly heating the substance, it should be placed in a bag made for the purpose, and which has also been previously heated. Sometimes, as in Spasm and its accompanying pain, a thin piece of flat tile, heated in an oven, and wrapped in warmed flannel, may be employed. For mere evanescent heat, flannel, strongly heated before the fire, may suffice.

36.—Enemata.—*Injections.*

An enema is a liquid injected into the large intestines, through the rectum, by means of a suitable instrument, of which there are three kinds: the syringe, the india-rubber, and the fountain enema. The first and last are expensive, and easily put out of order, besides that the syringe enema often requires the assistance of a second person. Of the two india-rubber instruments, the Higginson and the Kennedy, the former is the cheaper and more useful. Injections are used for various purposes, and consist of different substances, chiefly as follows:—

1. *To relieve the bowels.*—The necessity for aperients would scarcely ever arise if patients occasionally used injections, which act, not simply by washing away the accumulated fæces, but by distending the rectum and promoting peristaltic action more or less through the whole intestinal canal. For this purpose a large quantity—one or two pints, or even more—should be injected. The rectum tube should always be well greased, and the air worked out of the reservoir, before introducing the tube into the bowel. After the introduction of the fluid, the patient should lie down and retain the injection for ten or fifteen minutes. To facilitate the introduction and retention of the fluid, a vaginal tube should be used over the ivory one. This tube, after being held in warm water, should be bent into a curve, and fully inserted, the convexity being directed backwards. If not at first effectual, the injection should be repeated two or three times. In a case of constipation that had lasted

three weeks, in spite of pills, castor oil, black mixture, and jalap, given allopathically, Dr. Wilde, of Weston-super-Mare, administered twenty-seven injections in three days, the last proving completely successful. If the operation be performed *very slowly*, an irresistible desire to evacuate will show that a sufficient quantity has been injected; or a smaller quantity, *retained* as directed above, may be equally efficacious. Pain may arise from the displacement of flatus, or obstruction to the passage of the fluid at each bend of the intestines, but by waiting a few minutes, and using very gentle pressure, the injection can be continued. A *sudden* introduction, however, of a large quantity of fluid, by stimulating muscular action, would naturally cause immediate evacuation. As a general rule, the best fluid for injection is *cold* or *tepid water*. Warm injections are sometimes useful to relieve pain or irritation, either in the bowel or in an adjacent organ—the bladder, the uterus, or even the kidneys—but should be used sparingly.

2. *To restrain Diarrhœa.*—For this purpose small injections only are necessary—one to two ounces; if copious enemata are used, the intestines are stimulated to contract and expel their contents.

Starch water (tepid) is excellent for such a purpose; it should be made of the consistence of cream, and about two ounces used. In incurable cases, and when the Diarrhœa resists other means, a few drops of *Opium* should be added to the starch. Starch injections are especially useful in the acute, excessive, and dangerous Diarrhœa of Enteric-fever, Dysentery, Phthisis, and the Choleraic Diarrhœa of children.

3. *To remove thread-worms.*—For this purpose, half-a-pint to a pint of water, to which a dessert-spoonful of salt has been added, answers the purpose admirably (see Section on Worms). In order that the water may be thrown as high up into the bowel as possible, a vaginal gum-elastic tube may be attached to the enema syringe, and gently pushed right up the bowel. Here, however, as in other cases, general treatment is necessary to correct the constitutional condition on which the disease depends.

4. *To convey nourishment.*—Injections are sometimes used to sustain the system, by introducing food up the rectum

when it cannot be taken by the stomach, as in acute Gastritis, obstinate vomiting, Cancer, etc. Beef-tea, soup, milk, the brandy-and-egg mixture, etc., may be administered in this way. It is necessary that the rectum should be empty before injecting nourishment. Medicinal substances are also sometimes administered by means of enemata.

37.—Inhalation.

In its therapeutic sense, inhalation is the act of drawing air, impregnated with the watery vapour of medicinal substances, into the air-passages. It is an extremely useful mode of administering various remedies when their action is chiefly required on the mucous surfaces of the respiratory passages. *Iodine, Sulphuric Acid, Phosphorus, Kreasote, Borax, Permanganate of Potash, Aconite, Hyoscyamus, Belladonna, Ipecacuanha, Carbolic Acid*, etc., may be well given by inhalation in diseases chiefly involving the throat and large bronchial tubes, or in irritative or convulsive cough, or when there is fœtid expectoration. Quinsy, catarrhal and ulcerated Sore throat, chronic Bronchitis, Phthisis, etc., may be more or less benefited by inhalation. Inhaling is a very simple performance, and is often done quite effectively, and with less effort, without a special inhaler. All that is required is to hold the face over a jug of *hot* water, with a towel so arranged that it covers the face below the eyes, and surrounds the top of the jug, to confine the vapour. A few drops of the drug to be inhaled being dropped into the hot water, the medicine finds ready access to the air-passages through both the mouth and the nose. This may be practised for five or ten minutes at bedtime, and if necessary, and the patient has not to be exposed to cold air, it may be repeated once, twice, or oftener during the day. In acute inflammatory diseases of the throat, simple or medicated vapour may be inhaled as frequently as the patient's strength and other circumstances permit. A portion of the drug thus administered reaches the lungs and enters the circulation, but the chief action of the medicated vapour is on the throat and bronchial mucous surface.

In grave, prostrating diseases—Diphtheria, Croup, etc.—vapour may be inhaled by diffusing through the apartment the steam from a kettle with a long spout kept constantly boiling, or by forming a tent over the bed and covering it with blankets, and then bringing a pipe to convey the steam under it. In urgent cases, where suffocation is threatened, the room may be quickly filled with vapour by hanging wet towels before a large fire. In ordinary cases, simply keeping water boiling in the centre of the room will moisten the atmosphere sufficiently.

Besides conveying various remedies to the respiratory passages, the local application of the *steam of hot water* is very serviceable; it soothes the inflamed mucous membrane, aids expectoration from the lungs, and removes mucus from the crypts and follicles of the tonsils.

Inhalation can, however, be only a subordinate method of treatment in constitutional diseases, such as Consumption, and is rather palliative than curative. A well-chosen homœopathic remedy, administered in the usual way, just as certainly reaches the seat of the disease as anything inhaled can do, and at the same time tends to correct the constitutional error on which the local symptoms depend.

When a patient has to be exposed to cold air after inhalation, the vapour should be *cold*, and formed and distributed by the *Spray-producer*. This is an important precaution. In many cases in which it is desirable to make direct topical applications to a diseased part, this is the best method; the fluid may be injected or thrown as a fine spray, so as to be inhaled by the patient, by means of the spray-producer. By breaking up the fluid into a very small spray, substances can be inhaled without inconvenience, and brought into direct contact with the bronchial tubes, even as far as their small ramifications.

38.—Some Directions on Nursing.

In the treatment of the sick, the services of an intelligent, experienced nurse are quite as essential as the administration of appropriate medicines. To aid her to some extent in the

performance of her duty, the following *general* hints are offered. Particular instructions, suited to various diseased conditions, are given, when needful, throughout Part III., under "Accessory Treatment;" and to those instructions, persons having the charge of patients should always refer, besides making themselves also familiar with the various directions contained in this, Part II. Special directions concerning infectious fevers will be found in the section on Enteric fever. In serious and difficult cases, the medical attendant alone can furnish instructions adapted to the peculiarity of each case; and it is the nurse's duty faithfully to carry out his directions, and to report to him at each visit the effects of the treatment.

1st. *The Sick-room.*—The following points should be kept in view: (1) The apartment should be *airy*. A spacious, well-ventilated room, provided with window, door, and fireplace, allowing an uninterrupted admission of fresh, and the free escape of tainted air, is a valuable element in the management of the sick. Fresh air can only be ensured by an open window or door, or both. It is generally desirable to have a blazing fire kept burning night and day, both in summer and winter, as this assists ventilation; but the patient's head should be protected from it. During infectious diseases, besides diluting the poison with an abundance of atmospheric air, dilute *Carbolic Acid*, specially prepared for the purpose, may be used as an efficient and agreeable disinfectant.* To the same end, the room should be divested of all superfluous furniture—carpets, bed-hangings, etc. (2) The room should be provided with a *second bed* or convenient couch, to which the patient should, if possible, be removed for a short time at least once in the twenty-four hours. This ensures a change

* A solution should be frequently sprinkled about the floor, bed-clothes, handkerchief, etc., and be diffused through the room by a spray-producer: it acts quickly as an efficient disinfectant. It may also be used for personal disinfection—a point often but indifferently carried out—by adding it to the water in which the patient is washed, and is a valuable substitute for aromatic vinegar. It also makes an excellent gargle for fever patients to sweeten the breath. It is useful as a prophylactic to *visitors of the sick* in infectious diseases; for this purpose, a few drops should be sprinkled on the handkerchief before entering the sick-room. *Mason's Perfumed Carbolic Acid* is much more agreeable than ordinary preparations of the pure acid.

of atmosphere around the patient's body, and also allows time for the bed to be aired. (3) The patient's face should be protected from the glare of the sun, fire, gas lamps, etc., and in serious cases a subdued light may be secured to favour sleep; but the room should never be so darkened as to obliterate the grateful interchange of night and day. (4) The sick-room should be *quiet*. Silk dresses and creaking boots, the crackling noise made by handling a newspaper, etc., often distress invalids; but while the tones of the voice are gentle and subdued, whispering should be avoided, and all noise or unnecessary conversation forbidden. (5) The *temperature* of the room should be correctly ascertained by means of a *thermometer* suspended out of a current of air and the direct heat of the fire, as the sensations of the nurse cannot be depended upon as a guide. The temperature may be varied according to the nature of the disease from which the patient suffers. In fevers, Inflammation of the Brain, etc., about 55° will be the proper warmth. In Inflammation of the Lungs and Bronchitis, a higher temperature is necessary—60° and upwards. In all inflammatory affections of the chest, the air should be both warm and moist (see "Inhalation"), so as not to irritate the inflamed lining of the air-tubes. Cold air and too many bed-clothes are sure to increase the mischief. Under all circumstances, it must be remembered that the desired temperature is on no account to be maintained by excluding fresh air from the room, and making the patient breathe over and over again air which has already been made impure. (6) Patients suffering from infectious diseases should occupy a separate room if possible on an upper story, to prevent the spread of the infection to others; for infectious exhalations, being lighter than air, ascend.

2nd. *Cleanliness.*—Fears are often expressed that personal ablutions, or even changing the linen of a patient, may cause an eruption to be driven in or cold to be taken. If done properly, there is not the least ground for any apprehension. The patient should be sponged over as completely as possible, at least once a day, with warm or cold water, as may be most agreeable to his feelings, and then quickly but carefully dried with a soft towel. If he be much exhausted, he may be washed

a small part at a time; or, instead, first a damp and then a dry towel may be used under the bed-clothes, so as to disturb the patient as little as possible. *Carbolic Acid* may be added to the water—three or four drops of the pure acid to a quart of water. Sponging the whole surface of the body with cold or tepid water should never be omitted in fever, as it reduces the excessive heat, soothes the uneasy sensations, and is indispensable in maintaining that cleanliness which is so desirable in the sick-room. Water thus applied acts as a tonic, giving tone to the relaxed capillaries, in which the morbid action goes on. Frequent washing with soap and water also tends to prevent the occurrence of *bed-sores*, by keeping the skin in a healthy condition. If bed-sores form, notwithstanding, the patient should be placed on a *water-bed*. Directly there is the least indication of a bed-sore, the part should be coated over with a layer of flexible collodion, or moistened with brandy or other proof spirit, or rubbed with glycerine after being washed, or with zinc ointment (see "Formula," Part VI.), or covered with *Calendula* or *Arnica plaister*. The body- and bed-linen, including the blankets, should be frequently changed, and all matters discharged from the patient should be received into some disinfectant, and immediately removed from the room. The mouth should be frequently wiped out with a soft, wet towel, to remove the *sordes* which gather there in severe fevers. The water may contain a little *Perfumed Carbolic Acid*.

3rd. *Beverages*.—In most cases of illness, especially at the commencement, cold water, barley-water, gum-water, raspberry-vinegar-and-water, apple-water, toast-and-water, lemonade or soda-water (see "Demulcent Beverages," Sec. 28), are nearly all that are necessary. There is sometimes a foolish objection raised to allowing cold water to a patient; whereas it is not only most refreshing, but an agent of supreme importance, lowering excessive heat, giving vigour to the relaxed capillaries, and accelerating favourable changes. The quantity of cold water given at a time should be small—one to two table-spoonfuls—and repeated as often as desired. Sucking ice is also useful and grateful.

4th. *Food not to be kept in the sick-room*.—Miss Nightin-

gale's suggestion on this point is worth repetition here. It is this—do not keep the food, drink, or delicacies intended for the patient in the sick-room or within his sight. The air and temperature of the apartment are liable to hasten putrefactive decomposition, especially in hot weather, and the continuous sight of them to cause disgust. Rather take up for him, at the fitting time, and by way of surprise, two or three tea-spoonfuls of jelly, or as many fresh grapes as he may consume at once, or the segment of an orange. Or, if it be appropriate to his condition, a small cup of beef-tea, covered with one or two narrow slips of toasted-bread, just from the fire; this is much preferable to offering even a less quantity from a basinful that has been kept for many hours within reach of the patient's hand and eye.

5th. *Diet and Stimulants.*—In a disease which lasts three or four weeks, sometimes five or six, in which the waste of tissue is great, and when common food cannot be taken, it is of the utmost importance to supply the patient with appropriate nourishment, otherwise he may sink before the disease has completed its course. The following are points requiring attention. Patients are often unable to swallow or relish nourishment in consequence of the dry and shrivelled state of the tongue, when it will be found necessary to soften the mucous lining by putting a little lemon-juice and water, or other acceptable fluid, into the mouth a few minutes before offering food. All the aliments given should combine both food and drink in a *fluid* or semi-fluid form, until recovery has fully set in. The digestive functions being more or less completely suspended, the food given must be only such as requires the simplest processes for its assimilation. The following are examples of this form of nutriment:—*Milk* (a most important article in the treatment of fever patients), *iced-milk, thin arrowroot with milk; wine whey*, prepared by adding half a pint of good sherry to one pint of boiling milk, and straining after coagulation; *blancmange of isinglass or ground rice* (not gelatine); *yolk-of-egg*, beaten up with a little brandy, wine, tea, cocoa, or milk; *beef-tea and animal broths* (a little thickened with well-cooked rice, vermicelli, isinglass, or a few crumbs of bread); and in some cases, *alcoholic*

drinks. The addition of two or three grains of *pepsine* to each cupful of milk or broth facilitates its digestion.

A little good wine with an equal quantity of water may be given every hour or two, according to the requirements of individual cases. But the effects of the wine or brandy should be carefully watched by the medical attendant, and only given in proportion to the demands of the system, the bulk and force of the pulse being the main guides. Except in small quantities, stimulants are not required by children, nor by persons who can take a sufficient quantity of other kinds of nourishment, nor early in the disease. On the other hand, aged persons, and patients greatly prostrated, or with cold extremities, and livid surface, and with a weak, irregular, intermittent, or abnormally slow pulse, almost invariably require alcoholic stimulants. When they aggravate existing symptoms, their employment should be modified or altogether discontinued. But the judgment of the medical attendant should be brought to bear on this point, as sometimes an aggravation of symptoms might be the result of an excessive and too quickly repeated dose; when smaller doses, repeated as the effect begins to pass off, might be very advantageous. The decision to give or withhold stimulants should be regulated by two considerations: Can recovery be ensured without their use? and if so, will it be as rapid?

Further, nourishment should be given with strict *regularity;* in extreme and long-continued cases of prostration, every one or two hours, or even oftener, both day and night. The golden rule for feeding patients is, "Little and often." They should not be troubled with questions about what they will have; appropriate food should be given without their care. Frequently the functions of digestion and assimilation are so greatly impaired, that the largest quantity of nourishment must be given to sustain the patient till the disease has passed through its stages. Dr. Graves was so strongly impressed with the importance of nourishment in fevers, as to have said that he desired no other epitaph than that *he fed fevers*.

6th. *Watching Patients*.—Fever patients should be attended and watched day and night. Their urgent and incessant

wants require this, and their *safety* demands it. Instances have occurred of patients, in the delirium which so frequently attends severe fever, getting out of bed, and even out of the window, during the absence of the nurse, and losing their lives from injuries thus sustained.

7th. *Moderation in Convalescence.*—Food should only be allowed in great moderation, and never to the capacity of the appetite, till the tongue is quite clean and moist, and the temperature, pulse, and skin have become natural.

8th. *Change of Air.*—The salutary influence of change of climate and scene to persons who have suffered from a serious attack of fever can scarcely be over-estimated; and if the place or climate is intelligently chosen, the happiest results may be anticipated. After recovery from a serious attack of fever, the whole man becomes changed, and there seems to be a renewal of youth. Nothing gives such a beneficial direction to this change, or renders it so perfect, as a temporary removal to a suitable climate and locality.

PART III.

Medical and Surgical Diseases, and their Homœopathic and General Treatment.

CHAPTER I.

General Diseases :—A. Blood Diseases.

The General Diseases are divided, in the new nomenclature of the Royal College of Physicians, London, into two sections, A and B.

Section A comprehends those disorders which appear to involve a morbid condition of the blood, hence called *Blood diseases;* and most of which run a definite course, are attended with fever and eruptions on the skin, are more or less readily communicable from person to person, and possess the singular and important property of generally, but not invariably, protecting persons from a second attack. They are apt to occur epidemically. Of these epidemic visitations Dr. Farr observes, that they distinguish one country from another, one year from another, have formed epochs in chronology, have decimated armies and disabled fleets, have influenced the fate of cities, nay, of empires.

Section B comprises, for the most part, disorders which are apt to invade different parts of the same body simultaneously or in succession. These are sometimes spoken of as *Constitu-*

tional diseases, and they often manifest a tendency to transmission by inheritance.

Eruptive Fevers. The Exanthemata, or eruptive fevers, may be regarded as continued-fevers with an eruption superadded. They have the following common characters: they arise from a specific contagious poison, between the reception of which and the occurrence of the characteristic symptoms a period of incubation occurs, varying in different diseases, but more or less constant in the same disease, during which it is probably blood-changes are gradually taking place; they run a definite course; are accompanied by a specific inflammation of the skin, called the eruption, which passes through a regular series of changes; affect some part of the mucous membrane as well as the skin; and, as a general rule, only attack an individual once.

The true *Exanthemata*, presenting all these characteristics, are,—the *Small-pox*, *Measles*, and *Scarlet fever*; but there are other less perfect forms, as *Chicken-pox*, *Nettle-rash*, *Rose-rash*, etc. These Exanthemata are styled by the Registrar-General, *Zymotic diseases*, a term implying their origin in a poison which acts like a *ferment* in the blood; but in the new nomenclature just referred to, they are classed as *blood diseases*, and are regarded by sanitary reformers as preventible. In all of them a period intervenes between the reception of the poison and the accession of the fever, during which time the virus is latent, and the patient is, to all appearance, in good health.

The following table shows the latent period, or period of incubation, and of the accession and disappearance of the eruption, in the three chief eruptive fevers.

Diseases.	Period of Incubation.	Eruption appears.	Eruption fades.
Small-pox ...	12 days.	On 3rd day of fever.	Scabs form on 9th or 10th day of fever, and fall off about the 14th.
Measles	10 to 14 days.	On 4th day of fever.	On 7th day of fever.
Scarlet fever.	4 to 6 days.	On 2nd day of fever.	On 5th day of fever.

39.—Small-pox (*Variola*).

Since the vaccination of children has been made compulsory the mortality from Small-pox has greatly decreased. During the seven years, 1847-53, when vaccination was optional, the deaths per million of all ages amounted to 305, and of infants to 1,617 ; in the next seven years, during which time, although vaccination was compulsory, through its not being rigidly enforced the corresponding numbers were 223 and 817. During the third period, 1872-80, vaccination was not only obligatory, but officers were employed to enforce the observance of the law, and the deaths fell to 156 and 323. This saving of infantile life is most remarkable. It is, however, no less noticeable that the ratio of deaths amongst persons aged 45 and upwards rose considerably, the number being 22, 52, and 58. We are without particulars respecting persons re-vaccinated after puberty ; but there is no doubt that the protective benefit of vaccination diminishes with years.

The Registrar-General for England reports the deaths for 1890 as 16, and 23 in 1889. Each of these numbers was less than one-tenth of the smallest number registered in any preceding year. There were also 83 and 95 deaths in the two years attributed to Chicken-pox, and the Report suggests that it is possible some of these may have been mistaken cases of small-pox. This, however, will not in any degree account for the great falling off in the deaths ascribed to small-pox ; for in each previous year since 1874 there had been practically as many, and in most years even more, deaths ascribed to chicken-pox.

Definition.—Small-pox is a continued infectious fever, accompanied by a loathsome pustular eruption, which generally leaves behind permanent cicatrices.

Small-pox seldom recurs; less seldom than Scarlet fever and Measles ; but Mr. Marson records an instance in which a patient died of confluent Small-pox, who bore decided pits of a former attack.

Varieties. It presents two varieties : *Variola Discreta* and *Variola Confluens*. (1) In *V. discreta*, the pustules are com-

paratively few, remain distinct from each other, and may be easily counted. It is the simplest form of the disease, and, except during the first dentition, is rarely fatal. (2) In *V. confluens*, the pustules are numerous, and their outline is irregular, or they run into each other, forming large continuous suppurating surfaces. This variety is attended with the greatest danger to life; for the severity of the disease bears a direct proportion to the amount of the eruption, and the danger to the quantity of pustulation. If the pustules are confluent *on the face*, whether they are so or not on other parts, we class it with the confluent kind. "The danger is always rendered greater, *cæteris paribus*, when the eruption is very full about the head, face, and neck" (*Marson*). There is also a variety in which the pustules touch but do not coalesce, termed *Variola Semi-confluens*. When *Variola* occurs after vaccination, it is known as *Varioloid*, or *modified* Small-pox.

Course.—Small-pox runs through four stages:—The latent or *incubative period* lasts about twelve days from the reception of the poison; the *primary* or initiatory *fever* continues about forty-eight hours; the stage of *maturation* about nine days; and the *secondary fever* and decline of the eruption vary in length according to the severity of the disease.

Symptoms.—As in most other fevers, the following symptoms appear in the first stage:—rigor, heat, headache, sometimes delirium; *thickly-furred white tongue;* a deep flush upon the face; a hard, frequent pulse; a feeling of *bruised-pain* all over the body, but especially in the *back and loins;* more or less pain or *tenderness* at the *pit of the stomach*, and *vomiting*. The pain in the loins and the vomiting, the most characteristic of the premonitory symptoms, are seldom absent. When these are excessive and continuous, they are the precursors of a severe form of the disease. On the third or fourth day, there is an *eruption*, often so minute as to escape observation, of red spots, or small hard pimples, which feel *like shot in the skin*. It is first visible on the face and wrists, then on the neck and breast, and finally extends over the body to the lower extremities. If examined, the eruption may be seen upon the palate, and is often formed on the lining membrane of the larynx, trachea, and bronchi, giving

rise to salivation, sore-throat, cough, painful expectoration, and hoarseness. The pimples gradually increase in size until about the eighth day from the commencement of the fever, and become vesicular; the contents, at first watery and transparent, change to yellowish matter as the pimples become ripened into pustules (*pustulation*). The pustules are *depressed in the centre*, and surrounded by a small rose-red areola. During the time the pustules are filling up, the hands swell, and there is swelling of the eyelids and face, sometimes to such a degree as to obliterate the features. A peculiar, disagreeable odour now begins to emanate from the patient, which is so characteristic, that the disease at this stage might be known by this alone. On the first appearance of the eruption, the fever subsides; but in the confluent form, when it is at its height, a fresh attack sets in, which, to distinguish it from the precursory fever, is called the *secondary* fever.

In about eight days from the first appearance of the eruption, the pustules break, and discharge their contents; scales then form, which dry up, and, in a healthy state of constitution, fall off, in the course of four or five days. When this has taken place, purplish-red stains are left behind, which very slowly fade away in the course of some *seven* or *eight* weeks; or indelible, depressed scars remain, which are called *pits*. In the latter case, the person so marked is said to be "pitted with the Small-pox."

In *Variola confluens*, the secondary fever is often very intense, and is the most dangerous period of the disease. Severe and even fatal results may arise from exhaustive suppuration, erysipelatous imflammation, suffocative breathing, and a putrescent state of the blood.

Diagnosis.—An early recognition of this disease, both on account of the patient himself, and for the protection of others, is of great importance. *Severe pain*, evidently not muscular, *in the small of the back*, is often a characteristic symptom. As distinguished from *Measles and Scarlet fever*, the eruption is more perceptible to the touch, and gives the sensation of shot under the skin, *even before the eruption is visible*; further, the eruption of Small-pox is not distributed

in crescentic patches as is that of Measles. The difference between the premonitory symptoms of the two diseases would also assist in forming a differential diagnosis. As distinguished from *Enteric fever*, its attack is abrupt and severe, rather than insidious and uncertain. As distinguished from *Chicken-pox*, its eruption suppurates, and the fever is high; while in Chicken-pox the eruption is vesicular, does not suppurate, and the fever is mild.

Dangers.—The greatest danger arises from the *secondary fever* in the confluent form of the disease, between the ninth and twelfth days, when the pustules are ripening; for then the fever is likely to return, and the vital strength having been already much exhausted may prove unequal to resist its weakening force. Fatal chest symptoms and acute tuberculosis may arise, or there may be ulceration or opacity of the cornea, and loss of sight. An inflamed condition of the skin between the pustules, instead of the rose-red areola, is a bad sign. Hæmorrhages are of grave import. Infancy and advanced age are unfavourable periods; Mr. Marson states that hardly any who take it after sixty years of age escape death.* Violent and uncontrollable delirium is often an attendant on the confluent variety, and if it occur early, in persons who have lived freely or irregularly, it is a dangerous symptom. "Draymen, barmen, potmen, tailors, and prostitutes, are very unfavourable subjects to be attacked with Small-pox, owing to their habits of indulging freely, and almost daily, in strong drinks" (*Marson*). A plethoric habit, sleeplessness, and irritability, are also unfavourable. On the other hand, a quiet, contented, hopeful state of mind favours recovery. Small, dark, and badly-ventilated dwellings, poor or scanty food, insufficient clothing, want of cleanliness, intoxicating beverages, and other similar influences, are also elements which determine the more severe form of this malady. It is worthy of remark, as Dr. Letheby states in one of his quarterly reports on the sanitary condition of London, respecting an outbreak of Small-pox and the increase of Scar-

* The author attended a lady near London, aged about 65, who made a complete and very satisfactory recovery, by treatment chiefly with *Ant.-Tart.* and *Sulph.*

latina, that "these sudden outbursts of Zymotic disease show that the force of these maladies is not exhausted by sanitary measures, but only kept in check; and that, when occasion serves by neglect of proper precautions, the force manifests itself in all its original vigour."

Cause.—*Contagion.* It is supposed never to occur except from contagion; for large portions of the world have remained for centuries entirely free from it, until it was imported; and then it has spread so rapidly, and often so fatally, as almost to depopulate whole countries. "There are some grounds for believing, however, that Small-pox, in common with some other diseases, originated in the lower animals, and extended from them to the human species by infection or contagion" (*Aitken*). "There is no contagion so strong and sure as that of Small-pox; none that operates at so great a distance, both of time and place" (*Watson*). The period during which the poison is most powerful is, probably, when it is most perceived by the sense of smell; but it is probably communicable from the commencement of the primary fever, for the breath of the patient may convey it before the eruption appears on the surface; and the infection continues as long as the dry scales remain adherent to the body.

Epitome of Treatment:—

1. *Primary fever.*—Acon., Bell., Verat.-V.
2. *Eruptive stage.*—Ant.-Tart., Thuja ϕ, Sarracenia, Sulph.
3. *Suppurative stage.*—Ant.-Tart., Merc.-S., Apis, Lach.
4. *Retrocession of the eruption.*—Camph., Sulph.
5. *Confluent and malignant cases.*—Sulph., Ars., Phos.
6. *Complications.*—Phos., Ant.-Tart. (*Pneumonia*), Acon., Bry. (*Congestion of the lungs*). Bry., K.-Bich., Ant.-Tart. (*Bronchitis*). Rhus (*Severe pain in the Back*). Merc.-S. (*Glandular Swellings*). Apis, Bell. (*Dropsical Swellings, Closed Eyes, Swollen Throat*). Bell., Hyos., Stram., Ver.-Vir. (*Delirium*). Ars., Bapt. (*Sudden Prostration and threatened Syncope*).
7. *To prevent pitting.*—Sarracenia; also pricking the pustules on the face with a needle, after dipping it in Carbolic acid.
8. *Desquamation.*—Sulph., with frequent tepid sponging, and strict cleanliness.

9. *Sequelæ.*—Sulph., Merc.-Cor. (*Ophthalmia*). Hep.-S., Phos., Sulph. (*Boils*). See also under "*Complications*," above.

10. *Prophylactics.*—Vaccination, Sulph., Vaccinine, Thuja, Ant.-Tart.

Leading Indications :—

Aconitum.—Shivering, heat, dryness of the skin, rapid pulse, swimming and pain in the head, nausea and vomiting, and pain in the back and loins ; it may be used at any time during the course of the disease, when febrile symptoms are prominent. If there be much sickness with the fever, and a very rapid pulse, *Verat.-Vir.* may be substituted for *Acon.*

Antimonium Tart.—Is specific for Small-pox, and should be administered as soon as the nature of the disease is ascertained ; it is specially valuable during the eruptive stage ; and also in the primary fever, if nausea and vomiting, or convulsions, should occur. Indeed, during nearly the whole course of the disease, it may be given alone, or in alternation with any other remedy that is indicated. In favourable cases, if *Acon.* be given for the primary fever, and *Sulph.* during desquamation, to prevent after effects, *Ant.-Tart.* is the only other remedy required.

Belladonna.—Severe *head symptoms*, delirium, intolerance of light, etc. ; a few doses will usually afford relief. The danger of retrocession may be averted by the use of *Bell.*

Mercurius.—*Salivation, Ulcerated Throat,* fœtid breath, or bloody Diarrhœa, especially during suppuration.

Apis.—Excessive *swelling* of the face, eyelids, etc.

Coffea.—Two or three doses, if there be restlessness and *sleeplessness.*

Baptisia.—The late Dr. Bayes, also Dr. Williams, speak highly of this remedy as *maintaining vital force,* stimulating the sympathetic nerves, and averting the tendency to *sudden prostration* and subsequent syncope.

Camphor.—If the eruption *suddenly* disappear, or *suddenly* become malignant, with Dyspnœa, coldness of the skin, and symptoms of Paralysis of the Brain ; two or three drops in a little tepid water, every ten or fifteen minutes, for several times, till the skin becomes warm and the eruption reappears.

The hot-bath, or, to save time, the blanket-bath may be had recourse to with great advantage. (See Sec. 32.)

Opium.—Drowsiness or *stupor* and stertorous breathing.

Lachesis.—During the recent epidemic, this medicine was found invaluable in those cases in which a *typhoid condition* occurred during the stage of maturation (probably due to absorption of pus).

Sulphur.—When the disease pursues an *irregular* course; when the eruption exhibits a tendency to disappear from the surface; when the pustules, instead of being transparent or yellow, are green, purple, or black; when the blood with which they are filled announces a decomposition of this fluid, it is not to *Arsenicum* that we should have recourse, but to *Sulphur* (*Teste*). During the formation of the pustules, and when there is furious itching, and when the disease is on the decline, it should be given as a preventive to the usual sequelæ, and continued till recovery is complete. *Carbo Veg.*, *Nit.-Ac.*, or *Ars.*, under similar conditions, or when *Sulph.* only partially succeeds. *Vaccinine*, internally, is said to destroy the odour and effluvia of Small-pox.

Preventives.—*Sulphur*, *Cimicifuga*, *Vaccinine*, *Sarracenia Purpurea*—the last especially—are credited with curative or prophylactic virtues in this disease, but we have not had sufficient experience of their medicinal action to recommend them. We can, however, recommend the *Tincture of Sulphur* as a *preventive*. Jenner is reported to have failed in vaccinating thirty soldiers when they were receiving *Sulphur* treatment; subsequently all the men took the genuine Cow-pox. In our opinion, the three most reliable preventives are Vaccination, Tincture of *Sulphur*, and fresh air. Too much value cannot be attached to the dilution and dispersion of the Small-pox virus by free ventilation, both as a prophylactic for the unaffected, and as an agent for improving the condition of patients suffering from the disease.

Accessory Means.—The patient should be kept cool, the sheets and linen should be frequently changed, and ample provision made both for the *uninterrupted admission of fresh air*, and the *free escape of the tainted*. A small, ill-ventilated room, with too high a temperature, and hot cordials, inter-

rupt the tendency to recovery. In cold weather, the patient should have an extra blanket, and a fire should be kept burning in the apartment, and windows kept open. If the weather is mild, the patient will be better treated entirely in the open-air. "Nothing is of so much importance as pure air, and that in unlimited quantities. In this hospital * we have kept our windows open constantly by night and by day throughout the months of February, March, April, etc.; and this has been attended with the very best results, for our mortality is the lowest of all the Small-pox hospitals in London, and we were receiving our patients from the same sources, and some time before this epidemic reached its height." During the entire course of the disease, especially when the skin becomes hot, painful, or irritable, the whole surface may be sponged with warm water, to which a spoonful of *Mason's Perfumed Carbolic Acid* has been added, and well dried with a soft towel. This generally affords great relief. The use of *Perfumed Carbolic Acid* in the above manner, and the infusion of its vapour in the air of the apartment, tends to mitigate Small-pox, and to deprive it of its *contagious* character. In the early stage of the disease, great advantage may also be derived from the *wet-pack* (see Sec. 32), followed by a *sponge-bath*. Frequently changing the posture of the patient in bed, so as to avoid constant pressure on the back or nates, prevents *bed-sores*. After the pustules burst, powdered starch or flour should be freely applied to absorb the matter. Cleanliness, frequent tepid washings, and an occasional warm bath, are especially necessary during the last stage of the disease.

To *prevent pitting*, the pustules should be frequently smeared over with olive-oil, cold-cream, or a mixture of one-third of glycerine with two-thirds of water. A still better mixture is one of *cream and flour*, in such proportions as will make a thick paste. This should be freely painted over the face and neck, and renewed when necessary. By this means the action of light on the pustules (which, so to speak, photographs them on the skin) may be prevented, and that irrita-

* Dr. A. Collie, formerly Resident Medical Officer of the Homerton Fever Hospital.

tion allayed which accompanies the stage of maturation. The hands of children should be muffled and lightly secured, to prevent scratching, which might lead to ulceration. Adults may wear loose gloves. This precaution is especially necessary while the patient is asleep and acts unconsciously.

DIET.—Tea and dry toast, raw eggs beaten up with cold milk, beef-tea, etc.; grapes, roasted apples, and wholesome ripe fruits in season. For drink, cold water is generally preferred, and any objection to it by nurses or friends should be firmly resisted; in addition, milk diluted with about one-third or one-half soda-water, lemonade, raspberry-vinegar-water, currant-jelly-water, and barley-water. For further hints on diet and beverages, see Part II.

DISINFECTION.—The only absolutely safe method to adopt with infected *clothing* and *bedding* is to *burn them.* If this be objected to, they should be either baked or boiled at a temperature of 212°. Rooms should be disinfected by fumigation with burning *Sulphur*, with all apertures closed. The walls should then be divested of their paper, or colour or whitewash; the floor thoroughly scrubbed and washed over with a solution of lime or of zinc; walls and ceiling well lime-washed; and afterwards the doors and windows kept open for several days.

40.—Cow-pox (*Vaccinia*) and Vaccination.

DEFINITION.—*Vaccinia* is a disease of the cow, involving in man fever, eruption, and scars, similar to those of Small-pox. This inoculation was accidentally discovered by Jenner, a hundred years ago, to be protective against Small-pox in man.

VACCINATION, then, is the process by which the disease *Vaccinia* is artificially introduced into the human system for the purpose of protecting it against Small-pox.

This process is in strict accordance with the homœopathic principle, as it is preventive of Small-pox in consequence of its homœopathic relationship to that disease. Its tendency

is not only to prevent a fatal termination, and render the disease mild in its course, should it occur, but to keep off the disease altogether. The resident surgeon of the Small-pox and Vaccination Hospital at Highgate states that, in the course of his large experience, he found that when Small-pox attacked persons who had not been vaccinated it killed 36 per cent. of them—that is, *one in every three died;* but that when vaccination had been performed, the death-rate of those attacked by the disease fell to *one in fifteen.** He also found that the protective power of vaccination was in proportion to the way in which it had been done; thus, *one* permanent *cicatrix* after the operation gives a mortality from the disease of nearly eight in the hundred; *two* scars, of rather more than four per cent.; *three* scars, less than two per cent.; and if *four* scars, not one in a hundred die when attacked by the disease. This is a most important practical point to remember; if only one indifferent cicatrix remain after the operation, persons taking Small-pox in after-life die at the rate of 12 in 100; but if four or more cicatrices remain, only one in 200 will die should he contract the disease.

Further, Mr. Marson states, that 370 persons treated in the Small-pox and Vaccination Hospital, London, who believed themselves vaccinated, but who had no cicatrix to show, and trusted to such vaccination for their protection, died of Small-pox at the rate of $23\frac{1}{2}$ per cent. Persons, therefore, having no cicatrix remaining, are in a very unsafe condition.

* In a report of the Homerton Small-pox Hospital published in June, 1874, it is stated that of patients admitted from February, 1871, to same date in 1874, the percentage of deaths in vaccinated persons has been 8·6, but in unvaccinated, 37·8. In the British army, scattered all over the world, and consequently exposed to great risks, but carefully protected by vaccination, 1 in 1,000 is attacked; less than 1 in 10,000 dies. During the Ashantee war, the Small-pox raged at Cabenda. The native soldiers were vaccinated with favourable results. One officer marched five of his men into the town, and from them vaccinated nearly 200 natives. Only six failed to take; four of these had the Small-pox and two of them died. Of those who were successfully vaccinated, not one had the Small-pox. It is stated that in Sweden, forty years *before* vaccination, out of every million persons, 2,050 died annually; *after* vaccination, 158 only. In Berlin, before vaccination, 3,422; after, 176. In Paris, before vaccination, 80 out of 100; after, 14 to 16.

In performing vaccination, the following are the chief points to be observed:—

1. The *lymph* used should be taken from a child free from Scrofula, Syphilis, or any constitutional *taint;* eruptions, swollen glands, inflamed or sore eyes, are decided objections, and might result in the transmission of disease to healthy children.

2. The vaccinator should employ *a clean lancet;* Pyæmia, Syphilis, and other kinds of blood-contamination, no doubt often follow from the use of a foul lancet.

3. The lymph should be taken on the eighth day, *unmixed with blood* or any other secretion. Attention to these points will prevent the so-called *evils of vaccination.*

4. The matter should be inserted in four or five places in one arm.

5. When arm-to-arm vaccination cannot be practised, the lymph should be preserved in hermetically-sealed capillary tubes, or on ivory points.

6. Vaccination should be performed, when the child is in good health,* not later than the third month; indeed, its performance is now rendered compulsory during the first three months, which is perhaps the best period, as dentition has not then commenced.†

7. *Treatment* is scarcely ever necessary, as the condition thus set up, described as *Small-pox in miniature,* is very simple. But should there be much inflammatory redness and swelling, a few doses of *Acon.* or *Bell.* or *Apis* may be given. Occasionally, a poultice is necessary, or dusting the

* The records of Guy's Hospital show an interesting case of successful vaccination on an infant not in good health. The child had hereditary Syphilis; the mother had Small-pox, still suckling the child; the child was successfully vaccinated: the syphilitic and vaccine poisons existed in the system at the same time, but the Small-pox was not taken.

† Eczema, as also any other eruption, is usually considered a bar to vaccination. Several cases have however been recorded in which inveterate Eczema in children, affecting the scalp, face, flexures of the joints, etc., were quickly cured by vaccination. The Author has also performed vaccination under like circumstances with good results. We have often been informed by patients that children who were before cross and peevish, became, after vaccination, good and manageable. Mothers who have observed these effects are often anxious to have vaccination performed at the earliest period.

part with flour, or finely-powdered starch. As the pox are declining, a dose of *Sulphur*, morning and night, for a few days, is recommended, to correct any constitutional tendency to skin disease, sore eyes, etc., that may otherwise be called into action.

8. *Re-vaccination* should take place at the age of puberty; the great systemic changes which occur at this time of life rendering it generally necessary. Persons at this period, especially if they are about to change their place of abode, should be examined, and if they have only one cicatrix, or if that is imperfect, or if there is no cicatrix at all, they should be re-vaccinated. "For just upon thirty years we have re-vaccinated all the nurses and servants who had not had Small-pox, on their coming to live at the Small-pox Hospital, and not one of them has contracted Small-pox during their stay here" (*Marson*).

From the above observations it will be inferred that we think highly of the protection afforded by efficient vaccination. Evils indeed may have arisen from its careless performance; but they only tend to prove that this operation, like every other on the human body, should be performed with due care and skill. But if Small-pox does occur in vaccinated persons, it does so with a trifling mortality. During the last epidemic it was particularly noticeable that even where the eruption was confluent (which was very seldom the case) in patients who had been well vaccinated, the accompanying constitutional symptoms were much modified. The occurrence of the disease after one vaccination is not an argument for *non*-vaccination, but for *re*-vaccination.

41.—Chicken-pox (*Varicella*).

Definition.—This is a trifling infectious fever with vesicular eruption, almost confined to infants and children. It is similar in its appearance to Small-pox, for which it may be at first mistaken. But it differs from Small-pox in the slighter degree of fever which attends it, in the vesicles being pointed in the

centre, and becoming filled with a watery fluid about the second or third day, which is never converted into yellow matter, as in Small-pox, and in its rapid course, running through all its phases in six or seven days. Generally, on the third or fourth day, the vesicles dry up, forming crusts or scabs, leaving no permanent scars. The characteristic odour of Small-pox is altogether wanting. In some districts it is known as *Swine-pock* and *Stone-pock*.

Treatment.—*Rhus Tox.* is generally the first, and unless the symptoms mentioned below are prominent, the only remedy required, and under its action the disease soon disappears. *Aconitum.*—Febrile symptoms. *Belladonna.*—Headache, flushing of the face, or sore-throat. *Apis.*—Excessive itching with the eruption. *Mercurius.*—Should any of the vesicles suppurate. "*Ant. Tart.*—And if much irritation, the application of Camphorated oil to the pocks with a camel-hair brush" (*J. H. Clarke*).

Accessory Means.—Too early exposure to cold, especially during the winter or early spring, should be avoided. A milk diet is generally best.

42.—Measles (*Morbilli*).

Definition.—A continued infectious fever, preceded by severe Catarrh, accompanied by a crimson rash, and sometimes followed by inflammation of the mucous membrane of the organs of respiration.

This disease was formerly confounded with Scarlatina; but there are well-marked differences, as pointed out in the table following. Measles is generally unattended with danger, unless improperly treated. Unfortunately, however, so constant is this improper treatment, that about fifteen hundred children die of Measles every year in London alone. In the years 1887, 1888, and 1889, the deaths in London only were, respectively, 2,896, 2,421, and 2,302.

Children are usually the subjects of its attack; but when adults suffer, it is often a severe disease. Like Scarlatina

and Small-pox, it is highly contagious, often epidemic, and generally attacks the same person only once.

Modes of Propagation.—No susceptible person can remain in the same room or house with an infected person without risk of taking the disease; it is almost impossible to isolate the infection in large establishments or schools, and it is altogether too late to expect to prevent its spread to others, if on the outbreak of the disease in a family, the unaffected members had been with those who were sickening before the actual appearance of the rash. To send pupils home is thus to extend widely the probability of infection. It is propagated by *fomites*. This is proved by the fact that children's clothes, sent home in boxes from schools where the disease has raged, communicate the disease; and also by the same circumstance resulting when susceptible children have lain in the same beds, or in the same room, shortly after it has been occupied by patients suffering from the disease (*Aitken*). The contagion from *Measles*, *Scarlatina*, etc., only ceases when *desquamation* of the *cuticle* is complete.

Symptoms.—Measles passes through its course by stages: there is its period of *incubation*, lasting from ten to fourteen days; its *precursory fever;* its *eruptive* stage; and its *decline*. The peculiarity of the early symptoms is, that they resemble those of a *common cold*,—sneezing; red, swollen, and watery eyes; discharge from the nose; a hoarse, harsh cough; languor; fever; and sometimes diarrhœa and vomiting. The symptoms usually increase in intensity until, about the fourth day, the *eruption* appears, first on the face, then on the neck and breast, and soon after on the whole body. It is in the form of slightly raised red spots, which multiply and coalesce into blotches of a more or less crescentic form, particularly on the face, which is often a good deal swollen. An abundant eruption is more favourable than a scanty one. The eruption is two or three days in coming out, and remains at least three days; the fever then abates, and the eruption declines, becoming browner as it fades, and the outer skin is afterwards thrown off in a fine bran-like scurf. As the rash declines, diarrhœa sometimes occurs: this, unless very troublesome, should not be interfered with, as it is often beneficial. The maximum *tem-*

perature, as measured by the clinical thermometer, in ordinary cases, is 103°; if it rises above this, the case must be regarded as severe; if much below it, mild. The highest temperature is generally reached on the fourth or fifth day, after which it rapidly declines. In nearly every case the Catarrh extends down the larger bronchial tubes, and any sudden increase in the temperature, or the occurrence of rigors, would indicate the advent of a more serious condition than mere Catarrh, either in the lung substance (*Pneumonia*) or in the small tubes (*Capillary Bronchitis*).

Diagnosis.—Ginard calls attention to a most important symptom for the *diagnosis* of Measles in the *preliminary* stage, namely, *red spots on the soft palate, more especially on* the uvula, which appear *five or six days before* the eruption, even if there be no other symptom of the disease perceptible, and which remain for three or four days *after* the eruption is gone. Broussais, Valleix, and Schwarz all set great value on this symptom; and during the epidemic in France some years since it was constantly observed by Bonnichon.

Dangers.—Pneumonia, Bronchitis, and diphtheritic inflammation of the larynx are the chief causes of danger during the course of the disease. In grave attacks, the eruption is of a dark purple colour, and should always excite anxiety. Dangers may also *follow* the attack, as pointed out under "Sequelæ."

Epitome of Treatment.—

1. *Primary fever.*—Acon. and warm bath (see Sec. 32).

2. *The rash and catarrhal derangement.*—Puls., Gels.; Euphr. (*copious watery discharge from the eyes and nose*).

3. *Slow development of the eruption.*—Bell. (*drowsiness, startings*, etc.), Puls. (*troublesome gastric symptoms*), and the warm bath (see Sec. 32), Ammon.-Carb. (*tendency to relapse*).

4. *Retrocession of the eruption.*—Gels., Ammon.-Carb., Bry., Puls.

5. *Troublesome cough.*—K.-Bich., Spong., Bell., Bry., Ant.-Tart., Ipec.

6. *Severe and complicated cases.*—Camph., Ars., Mur.-Ac., Phos., Bell., Rhus Tox.

Table showing the Chief Differences between Measles and Scarlet Fever.

MEASLES.	SCARLET FEVER.
1. *Catarrhal* symptoms are prominent—watery discharge from the eyes and nose, sneezing, harsh cough, etc.	1. Catarrhal symptoms are usually absent, but there is great *heat of the skin*, *sore throat*, and sometimes *delirium.*
2. The rash is of a *pinkish-red or raspberry-colour.* The white streak produced by the back of the nail is not uniform, and lasts a shorter time than in Scarlet-fever.	2. The eruption is of a *bright scarlet colour*, and by drawing the back of the nail over the skin a white streak is produced, which lasts two or three minutes.
3. The eruption is somewhat *rough*, so as to be felt by passing the hand over the skin, and is in groups of a crescentric form.	3. The rash usually presents no *inequalities* to sight or touch, and is so minute and closely crowded as to give the skin a *uniformly* red appearance.
4. Liquid, tender, *watery* eye.	4. A peculiar *brilliant stare*, as if the eyes were glistening by an ethereal lustre (*Duggan*).
5. The cuticle is thrown off in minute portions, like *scales of fine bran.*	5. Desquamation of the cuticle is in *large patches*, especially from the hands and feet.
6. The most common *sequelæ* are diseases of the *lungs*, *eyes*, *ears*, and *skin.*	6. The most frequent *sequelæ* are *dropsy, especially after mild cases,** and *glandular swellings.*

Special Indications. — *Aconitum.* — Well-marked *febrile symptoms* at the outset, or to control inflammatory action during the progress of the disease. A dose every two, three, or four hours. Dr. V. Grauvogl gives *Acon.* alone in Measles, and also to cure the sequelæ, if these arise, as they often do, when the disease has been treated without *Acon.*

Veratrum Vir.—Useful during the febrile stage, if *congestion of the lungs* or *convulsions* be feared.

Pulsatilla.—Almost *specific.* Its symptoms are cough, worse towards evening, or during the night, with rattling of mucus in the air passages, or thick yellowish or whitish expectoration; thick greenish or yellowish defluction from the nose; Epistaxis; *catarrhal derangement* of the stomach, and diar-

* Dropsy is not a *necessary* sequela; it is only more apt to occur after mild cases because the same care is not taken with them as with severe cases.

rhœa. *Puls.* may follow, or be alternated with *Acon.* Cases are on record where the disease, having been suppressed, was followed by troublesome sequelæ of different kinds, which lasted for months; when *Puls.* was given, the exanthema reappeared, ran its course, and the patients lost their secondary disorders.

Bryonia.—This valuable remedy may be given in the first stage, in alternation with *Acon.*, to counteract imperfect, or suppressed, or receding eruption. A dose may be given every half-hour. The hot-bath or wet-pack will aid the medicines (see Sec. 32). *Bry.* is also useful, especially when alternated with *Ant.-Tart.* where *cough* is the prominent symptom. When the temperature begins to fall it may be given with *Puls.* to avert the tendency to Bronchitis or Pneumonia.

Gelseminum.—When the eruption is slow in making its appearance, or is imperfect, or suddenly recedes, especially when there is a *tendency to Convulsions*, it may be given in frequently-repeated doses. Some give it instead of *Puls.*

Ammon.-Carb.—Imperfect or retrocedent eruption.

Belladonna.—*Sore throat*, with painful and difficult swallowing; dry *spasmodic* cough; inflammation of the eyes; headache, drowsiness, restlessness, and tendency to *delirium.*

Ipecacuanha or *Ant.-Tart.*—Retching, vomiting, and much cough.

Mercurius.—Glandular swellings in the neck, ulcers in the mouth and throat, bilious diarrhœa, dysenteric stools, etc.

Phosphorus.—Pale, *imperfect*, or irregular *eruption; dry, hollow cough;* pain in the chest; nervous or typhoid symptoms. It is especially called for in the Pneumonia which is a common sequel of Measles.

Euphrasia.—Profuse lachrymation.

Sulphur.—During the decline of the disease, as well as after the eruption has completed its natural course and the other medicines are discontinued; to prevent secondary diseases. A dose twice or thrice daily, for four days; afterwards, once or twice for a like period.

Sequelæ.—Acute diseases may be rendered sources of danger *immediately*, by the pressing symptoms they call into play, and *remotely*, by establishing chronic diseases (*Sequelæ*).

Acute maladies may become starting-points for defective nutrition by inducing chronic derangement of the digestive functions, or interrupting the nutritive processes by some unexplained influence over the nervous system, or by developing a pre-existing dormant tendency to disease. In our opinion, the latter—a latent diathetic predisposition—is the most frequent cause of sequelæ. Every observant physician has noticed from the same causes a different sequence of results,—*i.e.*, that various sequelæ in children of the same family living under the same conditions and circumstances are brought out in accordance with their different temperaments and diatheses. From wide observation we can predetermine from the temperament and diathesis of a child the disease to which he is most liable, so as to be on the watch for special sequelæ. This is a great practical advantage only within reach of training and observation. The diseases most often followed by troublesome and chronic affections are: Measles, Scarlet fever, Whooping-cough, Diphtheria, Small-pox, and Enteric fever. In these, and in other acute affections, it is not therefore enough to endeavour to meet the urgent symptoms of the attack; the patient must be guarded and watched till the health becomes completely restored and confirmed, lest the defective nutrition should be converted into a chronic condition.

Measles is especially liable to be succeeded by sequelæ, which are more difficult to treat, and sometimes more dangerous, than the complaint itself; but, except in scrofulous or tuberculous children, they are generally the result of irrational treatment: under homœopathic treatment, and good management, patients usually recover rapidly and perfectly. If after the decline of the eruption the patient retains a temperature above 100°, some complicating disturbance may be suspected. The following are the diseases most liable to occur, with the leading remedies :--

Inflammatory affections of the eyelids (*chronic Ophthalmia*).—Merc.-Cor., Sulph., Acon., Bell., Ars.

Purulent discharge from the ear, or deafness.—Puls., Sulph., Silic., Merc., H.-Sulp.

Swelling of the glands.—Merc.-Iod., Calc.-Carb., Lyc.

Chronic Cough, Hoarseness, or other chest affections.—Phos., Hep.-S., K.-Bich., Spong., Ars., Caust., Carbo Veg., Sulph. Also Cod-liver oil.

Cutaneous eruptions.—Sulph., Iod., Ars.

"*Inflammation and ulceration of the mouth.*—Merc.-C.; wash of borax (a piece the size of a filbert dissolved in half a teacupful of water)."—*J. H. Clarke.*

Measles and Consumption.—A more emphatic reference may be made to tubercular disease of the lungs, or, more often, of the bowels, because it is not an infrequent sequel in patients of a delicate or strumous constitution. Cases of this nature are often under our care, and from long observation we have reason to believe that such a connection is far from uncommon. Whenever, then, a child makes but slow or imperfect recovery from Measles, more particularly if there be cough, soreness of the chest, or pain in the back; or tenderness, pain, or enlargement of the abdomen, Diarrhœa or irregular action of the bowels; and a high temperature, a grave constitutional disease may be suspected, and no time should be lost in obtaining the best homœopathic advice.

Accessory Measures.—*Cold* water, gum-water, barley-water, etc. No stimulants should be given. As the fever abates, milk-diet, gradually returning to ordinary kinds of food. In this, as in the other eruptive fevers, the *Wet-pack* (see Sec. 32), if well done, is of essential service. If the patient be packed imperfectly, serious results may follow. His linen should be frequently changed. He should be kept in bed, and the room sufficiently darkened to protect the eyes, but the proper and constant circulation of pure air must by no means be interrupted. The temperature of the patient's room should be about 60° Fahr., and guarded against rapid changes. Except during the very height of summer, a fire should be kept burning in the room. Tepid sponging, followed by careful drying, is necessary *several times* a day, also a frequent change of linen. If the eyelids become glued together by the increased secretion of the meibomian glands, they should be carefully sponged with tepid water, and smeared with a little Zinc ointment (see Formula, Part VI.), especially at bed-time. After the disease, the patient should be warmly clad, and

taken into the open-air *frequently*, when the weather is fine. He must not, however, go out too soon, or be in any way exposed to cold, in consequence of the liability to Bronchitis, Pneumonia, etc.

Preventive Treatment.—This is of little consequence, as the danger under our treatment is trifling. But it may be prevented or modified by giving children who have not had Measles a dose of *Pulsatilla* every morning, and one of *Aconitum* every evening, for a week or ten days, during its prevalence. *Puls.* has undoubtedly great influence, being to Measles just what *Bell.* is to simple Scarlatina.

43.—Scarlet Fever (*Febris rubra*)—Scarlatina.*

Definition.—A continued infectious fever, accompanied by a scarlet rash, by inflammation of the throat, by physical and mental depression, often by suppression of urine, and sometimes followed by acute Tubercular Nephritis.

It chiefly affects children, and usually occurs but once in the same person. During the epidemic in London (1869–70), however, instances were comparatively numerous in which the disease occurred a second time in the same person. The second to the fifth years of life are those in which it is most prevalent; after the tenth year its frequency rapidly declines. Adults generally escape. The opinion that the disease does not attack children under two years of age is erroneous, for in 1880 the deaths from this disease in England were 17,404; and out of this number 11,204 were children under five years of age, 886 of these being under twelve months old. Infancy, then, offers no exemption from severe attacks of Scarlatina. The Registrar-General, in his reports for 1890, says the deaths from Scarlet Fever numbered 6,974 for the year, and were in the proportion of 242 per million persons living. It is a notable fact that the mortality from this disease, which prior to 1885 had scarcely ever been less than

* A popular idea exists that when the disease is severe it is termed *Scarlet fever*, but when mild, *Scarlatina*; the terms, however, are strictly synonymous.

500 per million, and only once (1838) less than 400, fell suddenly to 233 per million, and has never again risen to as high a point as 300 per million.

The increasing prevalence of Scarlet fever during the present century entitles it to that rank among the causes of the mortality of childhood which was formerly occupied by Small-pox, for it is second only to *Typhus*. In 1863, the mortality from Scarlatina in London alone was 4,982, a year remarkable for the widespread prevalence and fatality of this epidemic, for scarcely a town or parish in England escaped. In Manchester, Leeds, and many other large towns, the mortality ranged for many weeks during that year from 100 to 120 deaths a week, and in the autumn of 1870, in London alone, the deaths were 108 per week. This high mortality led Professor Huxley, in his address to the British Association for the Advancement of Science, in September, 1870, to remark :—"Looking back no further than ten years, it is possible to select three (1863, '64, and '69) in which the total number of deaths from Scarlet fever alone amounted to ninety thousand. This is the return of the killed, the maimed and disabled being left out of sight. Without doubt, the nature and causes of this scourge will one day be well understood, and the long-suffered massacre of our innocents come to an end; and thus mankind will have one more admonition that 'the people perish for lack of knowledge.'"

Varieties.—There are three varieties, or, more correctly, degrees of intensity; for though it is convenient to speak of *S. simplex*, *S. anginosa*, and *S. maligna*, they are but one disease, developing itself more or less perfectly and severely, according to the constitutional condition of its victim and the amount of resistance which the constitution presents. The nervous system, the skin, the mucous lining of the throat, stomach, and bowels, the kidneys, and the circulation, exhibit disturbance in every case, although the degree of that disturbance may vary widely. Again, exposure to the contagion of *S. simplex* may give rise to an attack of *S. anginosa* or *maligna;* and the contrary. Finally, in proof of the identity of the different varieties of Scarlet fever, the same sequelæ are observable after each degree of the disease. It is

convenient, however, to describe the fever according to the different degrees of its intensity, viz.: 1. *S. simplex.*—A scarlet rash, with moderate fever, and redness but not ulceration of the throat. It may be expected to terminate favourably under proper treatment. 2. *S. anginosa.*—Ulceration of the throat, with tendency to the formation of abscess in the neck, which are more likely to be severe and fatal in winter than in summer. The temperature is high and the disturbance of the circulatory system great. This variety has many points of danger, and in several ways may jeopardise the patient's life. 3. *S. maligna.*—Intense fever, extreme depression of the vital strength, great cerebral disturbance, and low delirium, are superadded to the affection of the throat and skin, the fever soon assuming a malignant character. The tongue is brown; there is low delirium; the throat is dark, livid, or even sloughy; the eruption comes out imperfectly or irregularly, or alternately appears and disappears, and is *dark-red* rather than scarlet. This form of the disease is always one of *extreme danger.*

General Symptoms.—The *incubation* of Scarlet fever lasts five or six days, but may be of only twenty-four hours' duration. The *invasion* manifests itself suddenly, with the ordinary precursors of fever—chills and shiverings, succeeded by hot skin, nausea, sometimes vomiting, rapid pulse, thirst, frontal headache, and sore-throat. The last-named symptom—sore-throat—is generally the earliest complained of by the patient. In about forty-eight hours after the occurrence of these symptoms, the *characteristic rash* is perceptible, first on the breast, from whence it gradually extends to the neck, face, trunk, over the great joints and limbs, till the whole body is covered with it. The eruption is *bright scarlet,* and consists of innumerable red points or spots, which have been compared to a boiled lobster-shell. These spots either run together, and diffuse themselves uniformly over the skin, or else appear in large irregular patches in different parts of the body. The colour of the skin disappears on pressure, but returns on its removal. The appearance of the tongue is characteristic: it is first coated, the tips and edges are red, the papillæ are red and raised; afterwards the thick fur clears off, and the tongue

becomes clean and raw-looking. A diffused redness, sometimes of a dark claret colour, covers the mouth, fauces, etc., which disappears as the febrile symptoms and rash subside. On about the fifth day, the *efflorescence* generally begins to decline, and entirely disappears by about the eighth or ninth day, leaving the patient in a weak condition. The subsequent process of *desquamation* of the cuticle is variable in its duration; it takes place in the form of scurf, from the face and trunk; but from the hands and feet large flakes are separated, sometimes coming away entire like a glove or slipper.

It is not always, however, that the disease pursues this uniform course. Sometimes it occurs without any rash or sore throat being observed; or the eruption is livid and partial, and attended with prostration so extreme that the patient sinks in a few hours under its virulence.

Distinctive Features.—(1) The *scarlet rash*, already described. (2) *The high temperature of the body.* The thermometer placed in the axilla rises from 98° Fahr., the natural standard, to 104°, 105°, or even to 106°. (3) The papillæ of the tongue are *red and prominent*, and may be first seen projecting through a white fur, or, as this fur clears away, on a red ground, and has been termed the "strawberry-tongue." (4) A peculiar brilliant glistening stare of the eye, easily distinguished from the liquid, tender eye of Measles. (5) The *sore throat.* The throat is congested and swollen round the soft palate and tonsils, and the mucous membrane of the mouth and nostrils are generally affected.

Scarlet Fever and Other Diseases.—For the chief differences between it and Measles, see page 160. In *Roseola* the eruption is generally irregular, limited to the chest, and the throat-symptoms and fever are slighter. In *Small-pox* the early eruption sometimes resembles that of Scarlet fever; but the subsequent papular character of the former, and the previous pain in the back, sufficiently distinguish them.

Cause and Modes of Propagation.—The poison of Scarlet fever is of a subtle nature. Its earliest source is distinctly traceable to Arabia, but it has now spread over the whole world. Owing to the insanitary condition of their dwellings, it spreads extensively, and with great fatality, among the

poor. Contact is by no means essential to contamination; it is not even necessary to be in the same room in order to take the disease. It may be transmitted by *fomites*, in clothes, bedding, carpets, etc.: this is proved by the fact that medical men have often carried the disease to their own families. The invisible germs are very tenacious, cling to everything, and retain their virus for a year or two: they can only be destroyed by a temperature of 205 Fahr., or by disinfection and ventilation. The infecting power probably commences with the primary fever, attains its maximum degree at the commencement of desquamation, and continues till the old cuticle is completely removed. The disease is not limited to any season, but in England it prevails far more commonly from about the middle of September to the end of November. Pregnant women enjoy a peculiar exemption, but the puerperal state is specially favourable to the reception of the infection.

Caution.—It has been laid down as a maxim that in Scarlet fever medical advice ought always to be resorted to immediately; for the worst cases we meet with (as those in which mortification of the nose, cheek, or limbs takes place) are sometimes those in which the disease has, from its apparently mild character, been left to itself.

Epitome of Treatment.—

1. *Scarlatina simplex.*—Bell. during the course of the affection, preceded by a few doses of Acon., to moderate febrile excitement, and Sulph. or Ars. during desquamation.

"When the rash is pronounced, delirium, sore throat, sponge thrice daily with one part *dilute Acetic-acid* to six of water."—*J. H. Clarke.*

2. *Scarlatina anginosa.*—Acon. and Bell.; Gels., Apis (*great swelling of the throat*); Ammon.-Carb.; Merc.-Biniod. (*ulceration*); Ac.-Nit. (internally, or as a gargle, or both); Hyos. (*great restlessness, screaming, convulsions*); Stram. (*delirium, muscular jerkings*); Opium (*coma*); Zinc (*cerebral paralysis*).

"Ulceration of the throat and external glands of the neck, Crotalus 3. Ulceration of the throat, with acrid discharge from the nose and soreness of the nostrils, Arum Triph. 12 (this medicine, if given in low attenuations, must be freshly prepared, or have been specially preserved).

"*Scarlatina Rheumatica.*—When the patient is restless, constantly moving about, Rhus Tox. 3. Effusion into joints and serous cavities, pains aggravated by every movement, Bry. Heart complications, sharp pains, palpitation, Spig."—*J. H. Clarke.*

3. *Scarlatina maligna.*—Ailan., Ac.-Carbol., Ars., Ac.-Mur., Cup.-Ac., Ac.-Nit.; Hydrastis (*as a gargle,* eight drops to half a tumbler of water, *or the strong tincture as a paint to the tonsils*). The spray of Sulphurous Acid, or of *Mason's Perfumed Carbolic Acid,* diluted—one part of either to about ten of water—is also recommended.

4. *Secondary diseases* (*sequelæ*).—Ac.-Mur., Apis, Merc.-Iod., Phos., Sulph., etc. See p. 170.

Special Indications.—*Belladonna.*—*Bright-red,* clear, and uniformly-developed rash, difficult swallowing, *inflamed throat* and eyes, dilated pupils, sleeplessness, with nervous excitement, *starts,* etc. *Bell.* exerts a direct power over Scarlet fever, which in the modified variety, and when the eruption is *scarlet,* will generally yield to its action without the aid of any other remedy.

Aconitum.—Acute *febrile symptoms.* If given early, *Acon.* may modify and abridge the accompanying fever.

Mercurius.—Inflamed, swollen, or ulcerated throat; *salivation; ulcers in the mouth;* acrid discharge from the nostrils.

Apis.—*Rapid swelling* of the throat, and sharp *stinging* pains; suppression of urine.

Veratrum Vir.—In Scarlatina *simplex* and *anginosa,* this remedy greatly modifies *cerebral* and *arterial* excitement, heat of skin, *vomiting,* and concomitant symptoms during the early stage, and should be given in two-drop doses, 1x; for adults, the strong tincture may be used. This remedy may be alternated with *Bell.,* and together are the remedies most frequently required when cerebral disturbance is predominant.

Hydrastis.—Putrid ulcerations of the mucous surfaces. For malignant sore-throats it is invaluable, both internally and as a paint to the affected surfaces.

Coffea.—Extreme *restlessness, sleeplessness,* irritability, and a whining disposition, particularly at night.

Gelseminum.—This remedy diminishes cerebral congestion

and nervous excitement, moderates the pulse, and has great power in *developing the eruption* when it is imperfect. It is also recommended when the symptoms are of a *remittent* character.

Ailanthus Gland.—*Malignant* Scarlatina, especially where there is a fœtid discharge from the nostril accompanied by cracking at the angles of the mouth, fœtid discharge from the nostrils, nearly suppressed or purple rash, etc. Although we have used it on several occasions with good results, our experience is too limited to enable us to add anything of a positive character on the point; but it is strongly recommended both on theoretical and clinical grounds. It is important that the remedy be administered early, in a strong form, and frequently repeated till amendment sets in. When typhoid symptoms exists, it may be alternated with *Bapt.*, and both the remedies given in the strong tincture.

Ammonia Carb.—Enlarged and livid tonsils, which are covered with a rapidly degenerating, sticky, offensive mucous slime; burning pains in the throat; also a tendency to an accumulation of mucus in the mouth; faintly developed eruption; heaviness of the head; drowsiness, and not easily aroused attention (*Pope*); stertorous breathing; involuntary stools.

Lachesis.—In malignant Scarlatina, during the decline of the eruption, a typhoid condition often supervenes, probably from the absorption of the ichorous discharge from the throat. This condition is characterised by prostration, quick feeble pulse, low muttering delirium, and jactitation. In this stage, *Lach.* is an invaluable remedy, especially when the patient is worse in the afternoon, and after awaking from sleep.

Arsenicum.—Rapid *prostration* and *emaciation;* cold, clammy sweats; frequent, weak pulse; nightly paroxysms of fever, with burning heat, and threatening *dropsical affections*. *Ars.* is also recommended to hasten desquamation and repair of the skin, and to restore the lost tone of the kidneys. See also *Sulph.*

Sulphur.—During the decline of the eruption, as a preventive of Sequelæ. If both *Sulph.* and *Ars.* be required, they may be administered in alternation every six or eight hours; or *Sulph.* one day and *Ars.* the next.

Accessory Means.—The patient should invariably remain in bed; the room should be well ventilated, and at the same time the patient should be protected from direct currents of air. If possible it should be an upper room, as the poison rises, but does not descend. The sheets, blankets, and personal linen, as well as the air of the room, should be frequently changed. The light of the apartment should be modified to prevent injury to the susceptible eyes. He must not go out too early, as secondary symptoms are of frequent occurrence from neglect of this precaution. The patient should be frequently sponged over with tepid water, and dried rapidly, to obviate too long exposure. A *wet-compress* to the throat, if swallowing is difficult; *poultices*, frequently renewed, or spongio-piline, squeezed out of hot water, if the glands are swollen; the *inhalation of the steam of hot water*, as described in Sec. 37, as long as the throat is sore and painful; *injections* of tepid water if the bowels are costive. During convalescence, warm clothing, including flannel, is necessary, and subsequently a *change of air*, if possible at the sea-coast.

Beverages.—Cold water, gum-water, barley-water, weak lemonade, etc., in small quantities as frequently as desired. Drinking cold water, toast-water, or soda-water exerts a favourable influence on the kidneys, and tends to prevent subsequent diseases of those organs. To the same end, sucking and swallowing *small pieces of ice* are both useful and grateful.

Diet.—Roast apples, grapes, strawberries, and other ripe fruits in season, toast, gruel, etc.; gradually returning, as the disease declines, to food of a more substantial kind. The fever being of short duration, wine or brandy may generally be dispensed with; but in malignant cases, stimulants, *extract of meat*, etc., should be given freely as directed in the Section on Enteric fever. The quantity of nourishment and stimulants should be regulated by the character of the pulse.

Prevention.—When Scarlet fever prevails in a family or neighbourhood, the administration of a dose of *Belladonna*, morning and night, to children who have not had the disease, will often entirely ward off an attack; should the disease occur, notwithstanding this treatment, it will, undoubtedly,

greatly modify its severity. As a prophylactic we generally administer two drops of the 1st dec. dil. in half a wineglass of water the first thing in the morning. In severe epidemics the dose should be given twice daily for a few days. The value of this measure we have repeatedly verified in practice. Contagion should be avoided; all fermenting heaps of impurities, receptacles of excretion, drains, etc., should be thoroughly disinfected, if they cannot be removed. Pure air should play throughout the house, and cleanliness be observed by all its inmates.

Sequelæ.—If there be no complications or sequelæ, Scarlet fever may be expected to terminate favourably in about eight or ten days; but desquamation is not usually complete till after a much longer time. Even for two or three weeks after the primary fever has subsided the patient is not free from danger of inflammation and suppuration of the parotid glands, Otorrhœa, Ozæna, inflammatory affections of the eyes, and Albuminuria. These secondary diseases are happily infrequent after homœopathic treatment; but in weakly or scrofulous children they are not unlikely to arise. Pleurisy, Pneumonia, and Rheumatism less frequently supervene.

(1) *Glandular swellings* and *suppuration*.—Merc.-Iod., Ac.-Mur., Calc.-Carb., Phos., Aurum, Sulph., Graph., Lachesis, Alum., Rhus. If suppuration is inevitable, Hep. Sulph. Externally Carbolic-acid lotion or K.-Permang.

(2) *Otitis* and *Otorrhœa*—inflammation and discharges from the ears, or deafness.—Merc.-Biniod., Lyc., Silic., Ac.-Mur.; Alum., Graph., Calc.-Phos. (*obstinate cases*); K.-Permang. (*very offensive discharge*), a weak solution for syringing the ear, and a plug of lint saturated with the lotion inserted and frequently changed.

(3) *Pains in the ear*.—Merc., Puls., Bell.

(4) *Inflammatory affections of the eyes*.—Bell., Acon., Sulph.

(5) *Croupy cough*.—Hep.-S., Iod.

(6) *Acute desquamative Nephritis*.—Apis, Canth., Tereb., Merc.-Cor., Ars., Hell., Apoc. (See Sec. on Bright's Disease.)

This last affection, also termed *Post-scarlatinal Dropsy*, is the most common sequel, and occurs more frequently after mild than severe attacks. This is probably owing to the

disease not having expended all its force, so that some of the poison remains in the system; or to the neglect of proper caution during the period of recovery; or, again, to the patient having been in a previously debilitated condition. After the subsidence of the fever, usually from the tenth to the twentieth day, *Nephritis* may come on. The principal *symptoms* are—Frequent inclination to pass water, which is scanty, and often highly-coloured or smoky from the presence of blood, and of high specific gravity. The pulse is quick and hard, the skin dry, the patient is thirsty, and the body, face, and limbs are œdematous. Recovery is generally indicated by a copious secretion of urine.

Accessory Means.—Isolation is of primary importance for the welfare of the patient as well as of the family. A separate room should be occupied, containing as little furniture as possible, and from which curtains, carpets, and woollen stuffs have been removed. The ventilation should secure a copious and constant supply of fresh air, but so that the patient is not exposed to draught. A fire is necessary in cold weather. Carbolic acid, or Condy's fluid, should be freely used about the room. A sheet across the open door, kept moist with the disinfectant, will purify the air and lessen the danger of infection. Sponging the surface of the body with tepid water, piece by piece, moderates the great heat and allays restlessness, quiets delirium, lowers the pulse, and favours sleep. A wet bandage to the throat, when it is affected, is a sovereign remedy, and seldom fails to relieve. It should be fastened both round the back of the neck and over the top of the head, so as to protect the glands near the angles of the jaws. Inhalation of steam from hot water is useful when the throat is sore and painful. The *wet-pack* (see Sec. 32), especially at the commencement, is often most valuable, and it may be repeated several times, at a few hours' interval, as long as severe febrile symptoms continue. Warm baths, or sponging the body with tepid water, and drinking cold water, are of great importance; they facilitate excretion by the skin, and relieve the congested kidneys. In the treatment of the disease, to promote the free action of the skin is the most effectual means for preventing Post-scarlatinal Dropsy. It

is known that Albuminuria, and its attendant evils, can be produced in an animal by glazing over half or three-fourths of the surface of its skin. To do so completely would cause speedy death. This shows the importance, in the treatment of Scarlatina, of preserving the integrity of the skin. Nothing secures this so thoroughly as the *wet-pack*, or warm baths. A nourishing, digestible diet, is also essential to meet the exhaustion which usually exists, but no alcoholic stimulants. Cold water may be given *ad libitum*. During convalescence, warm clothing, including flannel, is necessary; and subsequently a change of air, if possible, at the seaside. The patient must not, however, go out too early, as secondary symptoms are of frequent occurrence from neglect of this precaution.

Occasionally the kidneys are, from the outset, the chief organs affected. Dr. Carroll Dunham, of New York, records several interesting cases in the Publications of the Massachusetts Homœopathic Medical Society, in which the renal affection was the form of the disease, rather than a sequel. He states that the group of remedies in which we are most likely to find the *simile* for a case of this kind comprises, among others, *Tereb.*, *Canth.*, *Ars.*, *Apis*, *China*, *Carbo Veg.*, and *Phos.*

44.—Typhus Fever (*Febris Typhus*).

Definition.—An acute and highly infectious fever, attended with a lethargic or confused condition of the intellect, and an eruption on the skin of a mulberry appearance, which it is believed may be generated *de novo* by privation, overcrowding, and defective ventilation. The duration of attack is from fourteen to twenty-one days; if beyond this it is due to complications.

It has been known as *putrid, malignant, spotted, pestilential, petechial, jail, hospital, ship, camp, and brain fever.* It attacks persons of both sexes, and of all ages; the greater the age, the greater the danger. It breaks out suddenly, and, as generally believed, can never be actually arrested in its course, although its symptoms may be relieved.

Symptoms.—The precursory stage varies, but is sometimes sudden, so that the patient yields to the disease within the first three days, giving up his employment, and taking to his bed; in this respect strongly contrasting with the protracted invasive stage of Enteric. Sensations of uneasiness, soreness, or fatigue, loss of appetite, *frontal headache*, and disturbed sleep are the early symptoms. The patient has a succession of slight rigors, is seized with a severe one (but less marked and severe than in Small-pox or internal inflammations), which is usually succeeded by dry heat of the skin, thirst, quick pulse, white, dry, often tremulous tongue, scanty and high-coloured urine, sometimes vomiting, heavy look or stupor, dull muttering delirium, prostration, and muscular pains; towards evening irritability, restlessness, and delirium increase, and if sleep occurs it is disturbed by dreams, or sudden starts. For several days the rigors occur at irregular intervals. The frontal headache ceases usually about the tenth day, always before the fourteenth.

The general appearance of a Typhus-patient is very marked, and affords a ready means of diagnosis. "In an average attack the patient lies prostrate on his back, with a most weary and dull expression of face, his eyes heavy, and with some dusky flush spread uniformly over his cheeks. In the advanced stage of a severe attack, he lies with his eyes shut or half-shut, moaning, and too prostrate to answer questions, to protrude his tongue, or to move himself in bed; or the mouth is clenched, the tongue and hands tremble, and the muscles are twitching and half rigid. The dryness of the mouth, the sordes on the teeth and lips, the hot, dry skin, and the deafness, are other symptoms which strike an observer so immediately as to deserve to be included in the physiognomy of the disease" (*G. Buchanan, M.D.*).

During the first week, the patient complains much of headache, noises in the ears, and, subsequently, deafness; the conjunctivæ are injected, the pupils contracted, eyes painfully sensitive to light, and therefore often closed. He becomes irritable, and his answers short and fretful. After the lapse of a short period, usually between the fourth and eighth days, the mind passes from a state of bewilderment to one of

delirium. This symptom is usually more severe, and appears earlier, when the disease attacks persons in the upper classes of society, in consequence, no doubt, of the greater activity of their brains. This is especially the case with confusion of ideas as to time, place, persons, and even personal identity, with vague, rambling talk, of which occasionally the patient seems conscious, and from which he can be roused. Afterwards, the delirium may become active and maniacal, or low and muttering. The patient often fancies that he is two or three persons, and the subject of a series of miseries and violence: confined in a dungeon, pursued by enemies from whom he vainly flies, or with whom he struggles; and he attempts to spring from bed, to reach the door or window to fly from his tormentors. Sometimes the delirium passes into a heavy stupor, with trembling of the tongue and hands, and twitching of the muscles (*subsultus tendinum*); but in favourable cases it subsides in two or three days. Improvement sometimes sets in quite suddenly. Between the thirteenth and seventeenth days the patient may fall into a long, deep, quiet sleep, awaking in twelve or more hours quite refreshed. He feels bewildered at first, but recognises friends, and is sensible of great weakness. But the delirium is gone, the countenance is tranquil, the pulse slower and stronger, the eyes resume their normal appearance, the tongue is moister, the complexion clearer, the skin softer, the eruption paler, the urine is copious and free, and the patient is able to turn himself on his side, and flex his leg, and at length convalescence is fully established.

Diarrhœa sometimes occurs, but at other times the bowels are confined; the evacuations are natural or dark (contrasting strongly with the yellow-ochre colour of the stools in *Enteric fever*), and may be involuntary.

The Pulse and Temperature.—In Typhus the pulse is rarely less than 100, sometimes 120, 130, or even 140 in the minute. In the last case, however, in adults, it is indicative of great danger. As a rule, the pulse pursues a gradually increasing rate of frequency up to the ninth or twelfth day, and afterwards undergoes, in favourable cases, a somewhat sudden decline. Cases so marked almost invariably get well. On

Differences between Typhus and Enteric (Typhoid) Fever.

TYPHUS.	ENTERIC.
1.—Comes on *quickly*, after incubating about nine days.	1.—Commences *slowly* and insidiously, the period of incubation lasting about thirteen days.
2.—Occurs at *any age*.	2.—Is most common in *youth* and childhood; rarely occurs after forty.
3.—Is rare among the wealthy classes, excepting doctors, students, and *visiting* clergymen.	2.—Is as common among the *rich as the poor*.
4.—The eruption is of a MULBERRY COLOUR, comes out in a single crop about the fourth or fifth day, and lasts until the termination of the disease. The spots generally appear first on the extremities.	4.—The eruption consists of ROSE-COLOURED spots, few in number, situated generally about the abdomen; comes in successive crops, which in their turn fade and disappear.
5.—The *brain* is chiefly affected, and the bowels are often but little so; the abdomen is natural, and the evacuations dark, but never bloody. (These symptoms are occasionally reversed.)	5.—The *bowels* are chiefly affected, the evacuations being ochre-coloured and watery, with congestion of the intestinal mucous membrane, sometimes hæmorrhage, or even ulceration; and the abdomen is tumid.
6.—There is a *dusky blush* on the face, neck, and shoulders, injected eyes, and contracted pupils.	6.—The expression is *bright*, the hectic blush is limited to the cheeks, and the pupils are dilated.
7. — Pulse and temperature rise steadily to about 120 and 105° respectively, until about the third day, remain stationary for about six days, then fall.	7.—Pulse and temperature rise and fall independently of each other, without uniformity; but both are usually high till the fifteenth day.
8.—Runs its course in about a *fortnight* or three weeks.	8.—Continues at least *four weeks*, and often five or six, or even more.
9.—Relapses are of *rare* occurrence.	9.—*Relapses* frequently occur, especially in certain epidemics.
10.—The tendency to death is by *Coma*, or *Congestion* of the *lungs*.	10.—The tendency to death is by *Asthenia*, *Pneumonia*, *Hæmorrhage*, or *Perforation of the intestine*.
11.—*Typhus* arises from *destitution* and *overcrowding*, with *defective ventilation*, and spreads by contagion.	11.—*Enteric* arises from *bad drainage* and poisoned *drinking-water*—as from a drain leaking into a well—decomposing animal matter, etc., often with deficient rainfall, certain electrical conditions, or an insufficient supply of ozone.

the other hand, departures from the gradual rise in the pulse, especially if considerable, mark the existence of complications or dangerous symptoms. In fatal cases of Typhus the pulse becomes more and more rapid, weaker, and smaller, up to the very hour of death. The first glimpse of dawning convalescence is afforded by watching the pulse; the temperature, as measured by the thermometer, is a valuable but less available sign; but whenever the pulse is fairly on the decline, especially if it become stronger and fuller, we may confidently conclude that the patient will recover. The reason why the temperature is an uncertain sign is that it varies with the local congestions which often complicate epidemic diseases. Dr. Maclagan reports that the average maximum of recovered cases, registered by the thermometer, is 104·3°, the highest recorded 105·2°, the lowest 103°. 106·4° to 109° have been observed in fatal cases. In ordinary cases, the highest temperature is gradually reached on the fourth or fifth evening; the decline is often gradual, commencing from the thirteenth to the seventeenth day, continuing for ten days, differing from Enteric fever in the absence of evening exacerbations. The *crisis* of Typhus is often indicated by no other symptoms than the decline of the pulse after having gradually reached its maximum degree of rapidity, and the fall of temperature indicated by the thermometer. There may be no marked perspiration, no critical diarrhœa, no striking alteration in the urine, or notable phenomena of any kind besides.

The Eruption.—The *Typhus rash* removes all uncertainty from the diagnosis, and usually appears between the fifth and eighth days, and consists of irregular, slightly elevated spots, something like small stains of mulberry juice, which disappear on pressure, and may be singly scattered and minute, or numerous and large: in the latter case two or more spots coalesce. They are usually first seen on the back of the wrists, borders of the axilla, and epigastrium, and thence spread over the trunk and extremities, but are rarely seen on the face and neck. The amount of rash varies greatly, but is frequently considerable, in some cases nearly covering the entire skin. From the first to the third day after the ap-

pearance of the rash, no fresh spots appear; but each spot, although it becomes less elevated and more dark and dingy, continues visible till the whole rash disappears. During the first three days, the typhus spots are temporarily obliterated by the pressure of the finger, but after that time they are indelible, thus differing from Enteric spots, which will at any time momentarily disappear under such pressure. They subside between the fourteenth and twenty-first days, but in fatal cases they remain after death.

Odour.—The *odour* of typhus patients is characteristic: it is offensive, pungent, and ammoniacal. Nurses familiar with Typhus, are able to recognise it by this symptom alone, and they estimate the amount of danger by the badness of the smell.

Nervous Symptoms.—It is from the constancy and prominence of these symptoms that the name of Typhus (*τύφος*, stupor) was first employed; and it is almost certain that it is through the nervous system that the poison of the disease chiefly operates. Hence, extreme restlessness, ringing noises in the ears, and low delirium or stupor, are invariably present to a greater or less extent. In fatal cases, about the ninth or tenth day, delirium merges into profound coma, or the condition described as *coma-vigil* may come on. In this latter condition, the patient lies on his back with the eyes open, and certainly awake, but staring vacantly into space, indifferent or insensible to everything transpiring around him. His mouth is partially open, his face expressionless, and he is incapable of being roused. The contents of the bladder and rectum are evacuated involuntarily. At length, the breathing becomes nearly imperceptible, the pulse is rapid and feeble, or cannot be felt, and the transition from life to death occurs without any gleam of returning consciousness, and can only be recognised by the eyes losing their little lustre, and the chest no longer performing its slow and feeble movements. Death occurs about the thirteenth or fourteenth day.

Unfavourable Indications.—Early, furious, and persistent delirium, with complete sleeplessness; *coma-vigil; convulsions;* extreme contraction of the pupil; involuntary twitchings of the muscles of the face and arms; abundant and *dark rash*,

nearly unaffected by pressure; great duskiness of the countenance, or lividity of the surface, with deep congestion of the dependent parts; involuntary, uncontrollable diarrhœa; suppression or retention of urine; blood, albumen, or casts of uriniferous tubes in the urine before the tenth day; tympanitis; a brown, hard, *tremulous tongue;* a temperature gradually rising to 107° Fahr., or higher; a great, sudden elevation of temperature in the third week; pulmonary complications; a small, weak, irregular, or imperceptible pulse, stationary at about 120; absence of cardiac impulse, or thumping action of the heart; bed-sores; gangrene; inflammatory or erysipelatous swellings, and other complications; a strong presentiment of death on the part of the patient. The prognosis is far more favourable in children from ten to fifteen years old, in whom the mortality is very small, than in patients over fifty, for then the mortality is very great.

Causes.—*Overcrowding, with defective ventilation, destitution, and want of personal and domestic cleanliness.* Hence it is the scourge of the poor inhabitants of our large towns. *Overcrowding* includes too many occupants in rooms, and the erection of dwelling-houses upon so circumscribed an area as to prevent the proper ventilation of streets and houses. A spacious dwelling, with free ventilation, robs the disease of half its power, and the danger of its spread to others is reduced to a minimum. *Privation*—famine through failure of crops, commercial distress, strikes, hardships in war, etc.—predisposes to Typhus by deteriorating the constitution. Before the days of Howard, Typhus was never absent from our prisons and hospitals; it was the scourge of the armies of the first Napoleon, and it decimated those of the Allies in the Crimea, the disease varying among the troops exactly in proportion to the degree of privation and overcrowding. In 1818, and again in 1847, the failure of the potato crop in Ireland gave rise to an epidemic of this fever, so that it is estimated that one-eighth of the entire population was attacked. *Dirty dwellings, filthy clothes,* and *personal squalor,* constitute a favourable *nidus* for the disease. Evidence is at hand to show that where attention is paid to general and personal cleanliness there is less danger of infection; but nevertheless, close contact with a patient and

his filthy clothes will convey the disease under the most complete sanitary regulations, even a momentary exposure being sometimes sufficient to produce it.

There is undoubted evidence that the poison of Typhus may be generated *de novo:* the circumstances under which this occurs are stated above. Without question, the specific poison is transmitted chiefly by the exhalations from the lungs and skin: this poison being inhaled or swallowed, finds ready access to the blood, upon which it exerts its morbid influence. It may also be transmitted by *fomites;* woollen textures and dark-coloured materials offering the most ready medium. The poison is most powerful from the end of the first week of attack up to convalescence, so long as the Typhus odour prevails.

Treatment.—It is a question whether typhus can ever be cut short, or the definite course of the disease altered, by the administration of remedies: some contend that it may be broken up in the first stage, by the combination of homœopathic remedies (especially *Arsenicum*) and hydropathic appliances; others believe that the disease must have its course. However, our experience amply proves that, in the great majority of cases, the violence of the symptoms can be held in check, the patient's comfort greatly promoted, and convalescence hastened by judicious treatment.

Epitome of Treatment.—

1. *Febrile symptoms.*—Acon., Bry., Gels.
2. *Cerebral symptoms.*—Hyos., Bell., Ver.-Vir., Stram.; Tereb. (*from uremia*).
3. *Sleeplessness.*—Coff., Bell., Gels.
4. *Great restlessness, twitching and tremor.*—Aga 3.
5. *Inflammation of Salivary glands.*—Quin., Sulph. 3x, Merc., Bin. 3x, Bubo, Merc. Viv. 3x.
6. *Stupor.*—Opi., Rhus.
7. *Extreme Prostration.*—Ac.-Mur., Ars., Ac.-Phos.
8. *Pulmonary complications.*—Phos., Bry., Acon. (*congestion*).
9. *Partial Paralysis* (*Sequelæ*).—Rhus, Strych., Galvanism.
10. *Putrescence.*—Carbo Veg., Ars., Rhus, Bapt.
11. *Convalescence.*—Ac.-Phos., Ac.-Nit., China, Sulph.

Special Indications.—*Aconitum.*—Thickly-furred tongue,

foul taste, thirst; heavy aching pain in the head; soreness and heaviness in the bowels and other parts of the body; exacerbations towards evening; the urine becomes dark and foul; the patient is restless, depressed in spirits, wakeful or drowsy, and dreams heavily in sleep. *Acon.* is of great service in the first stage, before the brain is much involved, and when severe febrile disturbance is present: but not afterwards, probably, except as an intercurrent remedy, and for inflammation or local congestion.

Baptisia.—Should typhoid symptoms appear, and there be difficulty in determining the exact nature of the disease, *Bapt.* should be promptly administered, and repeated as often as indicated.

Gelseminum—Is specifically indicated when, from some great excitement or over-exertion, sudden prostration of all the vital forces supervenes, and the patient experiences strange sensations in the head, with morbid condition of the motor nerves, manifested by local paralysis, or jactitation of certain muscles.

Hyoscyamus.—Severe pains in the head; dull, distressed, or haggard expression of the face; dry and glazed brown tongue; sordes on the teeth, noises in the ears, deafness, and *aberration of sight*—the patient seeing double or treble; delirium, in which the patient frequently manifests *a desire to escape* from some imaginary enemy or evil. *Hyos.* is probably one of the best remedies in this disease.

Belladonna.—Great *cerebral Congestion,*—bright-red, even bloated, face; *throbbing* of the temples and carotids; glistening and staring of the eyes; partial loss of the use of the tongue, so that the patient can scarcely articulate; much *thirst;* confusion of ideas; picking at the bed-clothes; furious *delirium.*

Opium.—Stertorous breathing; low muttering delirium; stupor; dark-red face; hot and dry, or clammy, skin; thick brownish-coated tongue; complaint of thirst (if the patient can express his sensations).

Ac. Muriatic.—In an advanced stage, this acid is sometimes capable of effecting a most beneficial influence; especially when there is marked *toxæmia,* with complete loss of muscular power; extreme dryness and parched appearance of the skin,

which is cold; quick, feeble pulse; low delirium; slavering; foul exhalations from the ulcerated throat; etc.

Rhus Tox.—Blackish-brown mucus on the tongue; thirst; bleeding from the nose; discharge of fœtid urine; involuntary, bad-smelling alvine evacuations; small and rapid pulse; stupor. In true Typhus, *Rhus* is often indicated.

Arsenicum.—*Sunken countenance* and eyes; *dry,* cracked *tongue; burning thirst; involuntary diarrhœa.* The late Dr. R. Russell thought this remedy capable of cutting short the disease; we are not aware that it has ever been administered in a sufficient number of cases to determine this; but it is not improbable that, given early, in low dilution, Dr. Russell's confidence in the medicine might be justified.

Ac. Nitric.—This remedy has often a very salutary effect, and may be given occasionally throughout the disease.

Accessory Measures.—The points of greatest importance may be briefly summed up as follows: (1) The patient should be placed in a large, or well-ventilated, room, so as to secure a continuous and ample supply of fresh air—cool, but not cold. Cases occurring in close, crowded rooms, in which this prime hygienic condition cannot be secured, should be removed to a suitable place. (2) Frequent changes of personal and bed-linen, and changes of posture to avoid congestion and bed-sores. (3) The *wet-pack* (see Sec. 32) is a valuable aid, especially early in the disease, and when the skin is dry and hot. (4) Food or beverages should be given in small quantities at regular and frequent intervals, including water, milk-and-water, tea, broth, and beef-tea. It is extremely important that, from the first, small quantities of very nutritious food should be given regularly and persistently. If prostration, feeble and irregular circulation, or complications indicate it, wine or brandy must be given. In some cases in which patients obstinately refuse all food, or are unable to swallow, life is often saved by nutritious or stimulating enemata. (5) Quiet, in noisy streets stuffing the ears with cotton-wool; cleanliness; sponging the whole surface of the body and carefully drying at least once a day; and intelligent and unremitting watching. In no disease is careful nursing more necessary. (See Sec. 38.)

Preventives.—As disinfectants—fresh air, efficient ventila-

tion, and cleanliness are of paramount importance. As additional means for avoiding infection, but by no means as substitutes—white-washing with quick-lime, washing the woodwork with soap and water, repapering infected rooms, cleansing the linen in water to which chloride-of-lime has been added, and the use of *Carbolic Acid* in the water employed in sponging the patient,—five drops of pure acid to a quart of water. Without cleanliness and fresh air, vinegar, camphor, and other so-called preventives are useless and only disguise noxious vapours. Persons in attendance on the sick should especially avoid the breath and the exhalations which arise on turning down the bed-clothes, as there is reason to believe that the poison of Typhus is mainly thrown off by the lungs and the skin. The volatile exhalations from these surfaces have the odour before described, and if not largely diluted by fresh moving air are extremely poisonous. Nurses should not be overworked, deprived of repose in bed, or of daily out-of-door exercise ; their diet should also be generous. If there is any ground to fear an attack of Typhus, *Hyos.* and *Bapt.* are probably the best preventives, with plenty of fresh air and wholesome food.

45.—Plague (*Pestilentia.*)*

Definition.—A specific, continued, contagious, and most malignant fever, strongly resembling Typhus, and characterised by swelling of the cervical, axillary, inguinal, and mesenteric glands, by carbuncles and petechiæ on the skin, and by congestion of the heart, liver, and spleen.

The Plague is endemic in Egypt, whence it is carried by infected vessels to the southern, eastern, and other ports of the Mediterranean; if proper precautions be not taken, it then spreads into the interior of the country. It has not been epidemic in England since the time of the "Great plague" in 1665, and is almost exclusively confined to the East. It is known as the *Black Death,* the *Pestilence,* and the *Levant Plague.*

* See Sec. on "Sanitary Hints for Europeans in Tropical Climates," page 79.

CAUSES.—The malaria arising from filth, carrion, and offal, which generates the specific poison.

SYMPTOMS.—After a period of incubation, lasting from a few days to three weeks, the disease breaks out with such virulence as sometimes to carry off its victim within a few hours; so suddenly is the vital principle extinguished. The patient suffers from restlessness, rapid exhaustion, mental anxiety, shivering, headache, vertigo, nausea, vomiting; followed by rolling of the eyes, Epistaxis, swelling of the tongue, laboured breathing, darting pains in the glands of the neck, armpits, and groins; in which there appear the characteristic buboes, generally accompanied by carbuncles in all parts of the body, petechiæ, constipation, and sometimes suppression of urine. In fatal cases, these symptoms are followed by delirium or coma and convulsions. When recovery is about to take place, profuse sweats occur about the fifth day, and the buboes suppurate, or more generally disperse.

TREATMENT.—As far as the Author knows, there is no homœopathic experience in the treatment of Plague; but as the disease resembles malignant Typhus fever, with Buboes and Carbuncles superadded, the following remedies are suggested, without any attempt to furnish details of symptoms:—*Bell.*, *Merc.*, *China*, *Ver.-Vir.*, *Gels.*, *Ars.*, *Rhus*, *Ipec.*, *Bapt.*, *and Ac.-Nit.* The treatment of Typhus should be consulted. Great cleanliness should be observed. Care should be taken to prevent the spread of the acrid and corrosive ichor from the buboes. Sanitary measures should be promptly and energetically adopted; by their adoption, Cairo has been freed from the Plague.

46.—Enteric Fever—Typhoid Fever (*Febris typhodes*)—Gastric Fever.

DEFINITION.—*Enteric fever* (so called from its chief pathological effects being evident in the bowels) is a continued, slightly infectious fever, lasting about twenty-eight days, often longer, with an eruption of a few rose-coloured spots on the chest, abdomen, or back, and attended with great *feebleness*, headache, abdominal pains or tenderness, tympanites, and

diarrhœa, which increase with the disease, the discharges being copious, liquid, of a *light-ochre colour*, putrid, and often containing altered blood. The fever may terminate favourably by gradual return to convalescence during the fourth week; or it terminates unfavourably towards the end of the third week.

The word *Typhoid* (τύφος and εἶδος) signifies similarity to *Typhus;* but although the two fevers have symptoms in common, *Enteric* is an essentially different disease, and there are several considerations which render it important to be able early to identify the variety we may be called upon to treat. Thus the *causes* of these fevers are different, and suggest sanitary regulations of a different nature; Enteric is less contagious than Typhus; the tendency to a fatal issue varies, and the treatment must be regulated accordingly; and, further, if not early recognised, patients may persist in their usual occupations at a time when rest in bed would conserve the strength and moderate the progress of the disease. For the easy recognition of these fevers, we have given the chief differences in a tabular form in the previous Section.

Age.—Enteric fever is rare in infants and in persons over forty-five or fifty. One-half the cases occur between fifteen and twenty-five. Even after thirty, persons are less liable than before. From forty-five to fifty, Peyer's patches naturally degenerate, and consequently the susceptibility to this fever diminishes or even ceases altogether.

Cause.—The poison of Enteric fever, according to Budd, Aitken, Murchison, and others, does not *originate* in decomposing sewage, but is transmitted by the specific poison contained in the discharges from the bowels of the person infected with the fever, by percolating the soil into the wells which furnish drinking-water, or by infecting the air through defective sewers or water-closets. In opposition to this hypothesis, we believe that sewer emanations, irrespective of their contamination with the discharges of Enteric patients, are sufficient to originate the disease; for it appears in houses having no communication by drain with any other dwelling. The stools of Enteric fever are not of such a virulent nature as has been stated, inasmuch as attendants on the sick are

rarely attacked, and the prevalence of the disease in autumn confirms the supposition that the poison is generated by fermentation or decomposition.

The fact that most concerns us, however, is, that the poison of Enteric fever is propagated by sewage and by sewage only, by its particles and gaseous emanations borne to us in the air, or polluting our drinking-water. That the poison is thus conveyed all are agreed, and therefore all alike concur in the necessity for eliminating the poison from our air, our water, and our milk. Many outbreaks have proved that by bad drainage on dairy farms or the use of contaminated water as an adulterant, or even for washing dairy utensils, milk may be the vehicle of infection.

The chief sources of water pollution, then, are the following: —(1) *Surface wells* which are supplied with water filtered through cesspools or adjacent churchyards, the nitrates of the soil imparting to the water deceptive sparkling and pleasant qualities; (2) the connection of drinking-water cisterns with *the soil-pipe*, or with the sewer by a *waste water-pipe*, which also serves as an air-shaft through which the sewer-gases rise into and permeate the water we are about to drink; (3) *the pollution of the air of our houses* by sewer-gases, through drain-openings delusively "trapped," but which allow the gases to rise slowly into our chambers, the rarefaction of the atmosphere, in winter especially, sucking them in with great force. Extra fires and lights in the winter season, when outer doors and windows are closed, form a sort of pump, by lessening the pressure upon the water-traps or the house-drain, and thus bring up the products of decomposition from the sewers. We too readily take for granted that the traps are air-tight, and that they do not allow the gases to find ingress to our apartments. The stools of enteric patients may also convey the poison by being thrown into some open space, the emanations from which impregnate the atmosphere and propagate the disease. See also under *Prevention* of Enteric fever.

Pathological Peculiarities. — The great characteristic lesions of Enteric fever are certain morbid changes—inflammation, enlargement, softening, and ulceration—in connection

with Peyer's patches, and the solitary glands. These changes begin first and are most marked in the lower portion of the ileum, where Peyer's patches are most evident; an Enteric ulcer is oval, round, or irregular, varying in size from a line to one and a half inches, or larger if several ulcers unite. Cicatrisation commences about the third week, and each ulcer takes about a fortnight to cicatrise. Sometimes, by extension of the ulceration, perforation of the intestine results. In prolonged cases, considerable thinning of the coats of the intestines and of the glandular structures takes place. The *pharynx* and *œsophagus* are sometimes congested, or even become the seat of superficial ulcerations. The *spleen* is generally enlarged, especially in young persons, may become quite pulpy, and has been known to rupture. As splenic enlargement is often very great, it may furnish an important diagnostic sign. As elsewhere stated, the body generally becomes greatly emaciated, the wasting involving the muscles, and probably the bones, as well as the fat.

Symptoms.—These may be divided into (1) those of the *accession*, and (2) those of the *three weekly periods*.

Unless the poison is very concentrated, there is a period of *incubation*, varying from seven to fourteen days, after which the disease sets in slowly and insidiously, as the writer knows from personal experience. The patient becomes languid and indisposed to exertion; is chilly and unwilling to leave the fire; the back aches and the legs tremble; the appetite fails, and there are even nausea and sickness; the tongue is white, the breath offensive, and often the throat is sore; the bowels are generally relaxed; the pulse is quickened, and the sleep disturbed. These symptoms gradually increasing, the patient has probably rigors, succeeded by heightened temperature, severe headache, and such muscular debility that he takes to his bed nearly always on the eighth day. This is the *accession*. The course of the fever may now be divided into three weekly periods (*Watson*).

1st Week.—The prominent symptoms are,—vascular excitement and nervous oppression, including a bounding pulse, 90 per minute, great heat of skin, thirst, and obscured mental faculties; the patient cannot give a coherent account of him-

self, complains of little except his head, and is usually delirious at night. The abdomen enlarges, is resonant on percussion, and there is tenderness or even pain on firm pressure, especially in the right *iliac fossa*, near the termination of the small intestine, where a peculiar *gurgling* sensation is conveyed to the fingers on pressure, arising from the mixing of the gastric fluids.

2ND WEEK.—Debility and emaciation become very marked, the muscles wasting as well as the fat; the urine is scanty and heavy, being loaded with urea from wasting of the nitrogenised tissues. There is also frequently *diarrhœa*, which generally increases to five, six, or even more evacuations in twenty-four hours. The *specific characters* of the evacuations are the following:—*Fluidity; pale ochre* or *drab colour*;* *sickly, putrid odour; absence of bile;* and *a flocculent débris* of disintegrated glands of the ileum. This débris may be discovered by washing the discharges. It is worth notice that often before a patient takes to his bed, or looseness of the bowels sets in, the *light-ochre colour* of the fæces furnishes the most marked of the *early* signs of Enteric fever.

3RD WEEK.—The debility and emaciation become extreme; the patient lies extended on his back, sinking towards the foot of the bed, without making an effort to change or preserve his posture. There is a bright and pinkish flush of the cheeks, which strongly contrasts with the surrounding pale skin; *sordes* cover the mucous membrane of the mouth and lips; the tongue is dry and brown, or red and glazed, often rough and stiff, like old leather, and sometimes deeply fissured; the urine presents many well-marked febrile characters, urea and uric acid are in excess, while chloride of sodium is diminished; the urine is also frequently retained from inaction of the bladder; the fæces pass without control, the tendons start from irregular, feeble contractions of the muscles; the patient picks vacantly at the bed-clothes, or grasps at black spots,

* The Author once diagnosed a case of Enteric fever in the early stage, in a patient at Oxford, whom he had not the opportunity of seeing, chiefly by the *light-ochre colour of the evacuations*. He prescribed remedies—chiefly *Baptisia*—which modified all the subsequent symptoms, and carried the patient safely through the fever, while many persons died in the locality from the disease. In a house hard by, one family lost three children during the epidemic.

like flies on the wing (*muscæ volitantes*), which appear before his eyes; he becomes deaf, no longer knows his friends, and on recovery will have little or no remembrance of anything that has at this time occurred, and in all probability his intellectual powers will be impaired for some time after convalescence.

In the majority of fatal cases, death occurs about the end of the third week; and it is a notable fact that there seems to be no relation between the general symptoms and the ultimate issue, rendering the disease one of great uncertainty and perplexity. Indeed, recent observations prove that the fever may exist, and run on even to a fatal termination, without the manifestation of any characteristic symptoms; the true nature of the disease being revealed only when a *post-mortem* examination has taken place.

The Eruption.—From the seventh to the fourteenth day, the characteristic *eruption* generally begins to show itself, chiefly on the sternum and epigastrium, in the form of rose-coloured spots, which are few in number, round, scarcely elevated, and insensibly fade into the natural hue of the surrounding skin. The spots appear successively from day to day, disappear momentarily on pressure, and continue visible for three or four days only. The first crop of the eruption is rarely fully conclusive of the nature of the disease, but successive crops, even of not more than two or three spots each, remove all doubt. The quantity of the rash bears no proportion to the severity of the disease. Although the rose-coloured rash is never met with in any other disease, yet we have treated cases of Enteric fever without being able to detect a single spot. Occasionally, also, very minute vesicles appear, looking like drops of sweat (*sudamina*), chiefly on the neck, chest, or abdomen.

Temperature.—The information afforded by the clinical thermometer in the *diagnosis* of Enteric fever is very important. In all the acute specific fevers the temperature is abnormally raised; in this, elevation is *gradual*, while in most others it is *abrupt*. During the first three or four days we have scarcely any symptoms to indicate the *invasion* of so serious a disease except a *gradual* elevation of the tem-

perature; but if, on the fourth or fifth day, the maximum temperature attained during the twenty-four hours be not 103·5° or 104°, the disease is most probably *not* Enteric fever. And, further, if on the first or second day the maximum temperature reaches 104°, the disease is some other acute fever, as the temperature only *gradually* attains such a degree in Enteric fever. At the commencement, the diagnosis is difficult, inasmuch as the characteristic rash does not usually appear before the sixth, sometimes not till the twelfth, day of the disease; and, indeed, in children, cannot sometimes be observed at any stage. Temperature is also an important element in the *prognosis*. Thus we have great *variations* in the temperature in Enteric fever, being low in the morning, and high in the evening. The greater these fluctuations at the end of the second week, the more favourable is the attack, and the shorter will be its duration. If the temperature fall considerably in the morning, even though the evening rise is great, the prognosis is favourable. On the other hand, should the temperature during the second week remain *continuously* high, we may predicate a severe and prolonged attack. Again, probably the first indication of improvement in cases of persistent elevation of the temperature is a decline in the morning temperature. When such a decline occurs, especially if it be repeated on subsequent days, even though the maximum temperature reached in the evening remain the same, we may be certain that the fever has begun to abate. It is true, a sudden fall in the temperature may be consequent on Diarrhœa and Hæmorrhage—probably the latter when it takes place suddenly; but, usually, other symptoms would indicate such an occurrence. Unlike Typhus, the decline of the temperature is generally gradual.

Dangers.—(1) *Hæmorrhage*.—This may occur from the nose, the chest, or the ulcerated patches in the *ileum*, during the separation of the gland-sloughs, and may be either capillary or arise from the opening of a large vessel. It is especially likely to occur in strumous constitutions. The discharge of blood may be so great as to be immediately fatal by swooning, or it may be remotely fatal, by exhausting the patient so that he has no power to bear up against the fever in its subsequent

course. Sometimes, without any escape of blood from the orifice of the bowel, the patient becomes suddenly blanched and dies in a swoon. In such a case, a *post-mortem* examination finds the intestines distended with clotted blood. (2) *Exhaustion* from *profuse and persistent Diarrhœa*, in cases in which the affection of the mucous membrane has been very severe and obstinate. (3) *Perforation.*—The ulceration may extend till the coats of the bowel are perforated, and cause fatal Peritonitis; or, such a result may follow when there is very little intestinal disease, except at the point of perforation, and indeed very little constitutional disturbance; for there is no necessary correspondence between the constitutional signs and the local mischief. Perforation may happen during the second or third week, or, more frequently, during prolonged and imperfect convalescence. The symptoms of this occurrence are,—a sudden pain and tenderness in the abdomen, with swelling, more or less nausea and vomiting, an altered expression of the features, and death in one or two days. (4) *Congestion.*—The lungs may become congested, giving rise to Bronchitis, Pleurisy with effusion, or Pneumonia; or latent tubercle may be called into fatal activity: in short, there is a tendency to congestion in the three great visceral cavities—the head, the chest, and the abdomen. So probable is the development of tubercle in the lungs of strumous patients, that it has been laid down that, if the physical signs of Bronchitis continue beyond twenty-eight or thirty days, combined with hurried and difficult breathing and with considerable irritation of the lungs, it may be assumed that the deposit of tubercle has commenced. (5) *Relapse.*—Patients recovering from the disease are peculiarly liable to a relapse, and that generally from inattention to diet, or from abandoning the recumbent posture too soon.

It will be inferred from the preceding observations that this disease does not run a uniform course; indeed, cases have been recorded in which a fatal termination has been reached without the manifestation of any characteristic symptom. In our practice we have met with the greatest conceivable varieties, so that Enteric fever may be said to present, in the mode of its accession, in the course, gravity, and termination

of the symptoms, so many forms, complications, and accidents, dependent on constitutional idiosyncrasies and external circumstances, as to justify its being considered an *epitome of the whole practice of medicine.*

According to the Registrar-General's report of some twenty years ago, we find that 20,000 persons died annually of Enteric fever, and probably 150,000 were yearly laid prostrate by it.

It proved fatal to the Prince Consort in 1861, twenty-one days from the commencement of the attack; and very nearly so to the Prince of Wales in 1871.

A marked decline of fatal cases within the last few years is shown by the Registrar-General's report for 1890. Therein he says the number of fatal cases for the year was 5,146, in the proportion of 179 to a million of persons living. For six consecutive years, 1885–90, the mortality from this disease has not exceeded 185 per million, whereas in no previous year was it once lower than 212.

TREATMENT.*—Unless distance absolutely forbids it, the treatment of this disease should only be confided to a medical man. Before the true character of the fever is detected, the remedies prescribed in the Section on "Simple fever" may be given.

EPITOME OF TREATMENT.—

1. *Invasive Stage.*—Bapt.
2. *Uncomplicated cases.*—Bapt., Ars., Rhus.
3. *Great prostration.*—Ars., Ac.-Mur.
4. *Excessive Diarrhœa.*—Ars., Ver.-Alb. (*involuntary*); Ipec., Carb.-V.
5. *Hæmorrhage from the bowels.*—Tereb., Ac.-Nit., Ipec.
6. *Complications.*—Phos., Bell., Opi., etc. See Sequelæ.
7. *Debility following.*—Ac.-Phos., Ign., Ammon.-Carb., Ferr., Sulph., China, Nux V.

SPECIAL INDICATIONS.—As soon as Enteric fever is suspected, *Baptisia* should be administered,—one or two drops of 1x dil., or of the strong tincture, every two or three hours. This remedy will modify, and even cut short the attack, by destroy-

* For some remarkable statistics in favour of Homœopathy, see *The Homœopathic World*, July, 1889.

ing the poison in the blood. Its influence in this disease is comparable to that of *Acon.* in simple fever; but *Acon.* exercises little or no curative power in Enteric fever, which depends on the presence of a specific blood-poison, and requires the action of an antidote. Should, however, the administration of *Bapt.* have been much delayed, and the specific poisonous effects produced, other remedies must be resorted to; especially *Ars.* and *Rhus*, which are the two best remedies in uncomplicated cases after the *Baptisia* stage.

Arsenicum.—Frequent, copious *Diarrhœa*, which may become *involuntary*, of drab or ochre-coloured evacuations; enlargement, sensitiveness, and gurgling of the abdomen; excessive *prostration; thirst;* nearly imperceptible, intermittent pulse. This remedy is of priceless value, and its administration should be persevered with even in the most disheartening cases. It may be alternated with *Carb.-Veg.*

Acid.-Mur.—Great nervous depression; stupor; sinking down in the bed; *putrid sore throat;* etc. It probably ranks next to *Ars.* in the gravest symptoms of low fever. For the throat it may also be used locally. *Ac.-Nit.* may also be of service in similar conditions.

*Veratrum Viride.**—Great susceptibility of the stomach, with violent *retching* and *vomiting*, indicates this remedy; the smallest quantity of food returns; severe headache, stupor, delirium; great prostration. *Gels.* is also useful for the brain symptoms.

Bryonia.—Bitter taste, brown-coated and rough tongue, bilious derangement, stupefying headache, *cough*, irritability. For furred tongue, rheumatic pains and restlessness, *Rhus* may be alternated with *Bry.* every third hour.

Carbo Veg.—Offensive smells from the patient, *fœtid* evacuations; also cold extremities, cold sweats, and rapid sinking. We recommend the 1x trit., and several grains at a dose.

* In a case we once treated by correspondence we were not aware that Enteric fever was epidemic in the town, but on receipt of description of symptoms as here noted, which *Acon.* had failed to control, we sent *Ver.-Vir.* and *Gels.;* the symptoms were quickly moderated, and the patient made a good recovery.

Mercurius.—Greenish or yellowish evacuations, but less serious Diarrhœa than described under the previous medicines; thickly-coated tongue; copious perspirations.

Belladonna, etc.—When the brain is much involved, *Bell.*, *Hyos.*, or *Opi.* is required. (See *Typhus fever.*)

Terebinthina.—Hæmorrhage from the bowels; retention of urine.

Acid.-Phos.—Milder forms of Typhoid, especially for the nervous prostration; also after the severity of a bad attack has been moderated by other remedies.

Sequiæ.—During convalescence, various affections are liable to arise, such as troublesome Cough, Indigestion, Headache, Deafness, etc. For these it is only necessary to prescribe such remedies as are elsewhere described. For *brain symptoms*, Bell., Hyos., Zinc., Opi., Rhus; for *chest-symptoms*, Phos., Bry., *or* Iod.; for *Indigestion*, Nux Vom., Carbo Veg., Ign., *or* Merc. *Deafness* usually disappears with the *general nervous prostration*, under the use of Acid.-Phos., China, *or* Chin.-Sulph. China also moderates the *excessive hunger* often experienced during convalescence, and is especially useful if there has been much waste of the tissues of the body. Lastly, Sulphur aids the *recuperative* efforts of nature, and may be administered for some time after the more specific remedies are discontinued.

Accessory Measures.—The following points require special attention, because the nursing of Enteric is always prolonged. The reader is also requested to study the more detailed directions on nursing the sick (Sec. 38), and the various accessory measures that are described in Part II.

1. *The Apartment.*—It is desirable that the patient should occupy a spacious, well-ventilated room, in which a fire is kept burning, and from which all unnecessary furniture, and particularly anything that would retain emanations, as carpets or bed-hangings, should be removed. Sometimes a second bed, or couch, which the patient might occupy for a few hours daily, will be found a salutary and refreshing provision, by affording a change from the fever-atmosphere surrounding him, but generally the less a patient is moved the better. Noise and unnecessary talking should be

avoided, and a glare of light excluded, without darkening the room.

2. *Rest.*—The patient should be but little disturbed, and enjoy complete rest during the whole course of the disease. The importance of this is proved by *post-mortem* examinations, which often show vigorous attempts on the part of neighbouring structures to limit, by union and adhesion, the results of perforation, obviously indicating the necessity of absolute rest throughout the disease (*Aitken*). Any efforts made when the ulcers in the *ileum* are healing might arrest the cure, and even re-excite that morbid action which ends in perforation. The healing process, indeed, is often very tardy, and has been found still incomplete even when death has occurred on the eightieth day. It is also equally important to secure mental rest; for acute and fatal inflammation of the brain has sometimes been caused by excitement, even when convalescence seemed nearly perfected.

3. *Cleanliness.*—The patient's linen, and every article of bed-furniture, should be scrupulously clean, and frequently changed, and all discharges received into some disinfectant, and speedily carried from the room. The mouth should be kept sweet and free from the *sordes* which are apt to gather, by being frequently wiped out with a soft towel, moistened in water, to which a little *Perfumed Carbolic Acid* has been added. A similar addition may be made to the water with which the patient's entire person should, if possible, be sponged from time to time. Any susceptibility to bed-sores should be guarded against.

4. *Hydropathic Applications.*—In addition to the sponging and washing just recommended, we have found the *abdominal wet-compress* of great utility. (See Sec. 32.) It tends to diminish excessive Diarrhœa, checks the spread of ulceration of the *ileum*, and thus obviates perforation. Should lung-complications arise, the compress should be applied to the chest as well as the abdomen. During the early course of the fever, the *wet-pack*, described in Sec. 32, is an invaluable application, and tends to give a mild character to the disease.

5. *Beverages.*—At the commencement of the fever, pure water, toast-and-water, gum-water slightly sweetened (one

ounce of gum-arabic, half an ounce of loaf-sugar, one pint of hot-water), barley-water, lemonade, or soda-water, is nearly all that is necessary. Cold water is an agent of supreme importance: it lowers the excessive temperature, and proves a valuable adjunct to the medicines prescribed.

6. *Diet and Stimulants.*—A distaste for food, and a difficulty in swallowing, often arise from the arrested secretions of the mucous membrane of the tongue and throat; the parched tongue should then be moistened by a little lemon-juice and water, or other pleasant fluid, a few minutes before food is taken. Until, with returning health, the more or less suspended powers of digestion are regained, it is essential that all nourishment should be of the most easily-digestible kind, and administered in a fluid or semi-fluid form, combining food and drink. In the later stages a little good wine and water, in equal proportions, may be given at one or two hours' interval, as individual cases may require, the medical attendant *always carefully noting the effect;* when the patient "sinks in the bed," alcohol must be given. *Fruits* are not admissible in consequence of the danger of extensive ulcerations.

7. *Moderation in Convalescence.*—In Enteric fever, and in other conditions in which the bowels have been inflamed, moderation is especially necessary during convalescence. Solid food should not be given till the temperature of the patient in the morning and evening has remained, at least for two days, at about the natural point—98–99° F. The tongue may be moist and clean, and the appetite vigorous, but the Enteric ulcer yet unhealed. If the thermometer shows an evening temperature of about 101° F., with a morning temperature one or two degrees lower, solid meat might be sufficient to induce fresh irritation of the unhealed ulcer, fatal Hæmorrhage, or perforation. Not until the evening temperature has remained, for at least two successive days, below 99° F., can we be certain that the ulcers have healed, and that ordinary food may be allowed without risk. We have known solid meat given too early, bring back the most severe features of the disease. Any food that is difficult of assimilation might cause an accumulation in the bowel, and lead to a

relapse. We remember an injudicious nurse giving roast-duck to a patient recovering from a very serious and prolonged attack, which brought on a relapse, and the patient nearly lost her life. If stimulants have been given they should be gradually withdrawn as the quantity of nutritious food is increased. Even when convalescence has somewhat advanced, moderation should still be exercised, as the appetite is often excessively craving.

8. *Change of Air.*—This, and rest from active employment, are essential to vigorous recovery. We fully endorse Dr. Aitken's statement,—*No man can be considered as fit for work for three or four months after a severe attack of Enteric fever.*

9. *Precautionary Measures.*—To check the contagion :—(1) All discharges from fever-patients should be received into vessels containing carbolic acid or Condy's Fluid. (2) All tainted bed- or body-linen should, immediately on its removal, be placed in water strongly impregnated with the same agent. (3) The water-closet should be flooded several times a day with a strong solution of carbolic acid ; and some should also be placed there for constant evaporation. (4) So long as fever lasts, the water-closets alone should be used as receptacles for the discharges from the sick, and this not till they have been disinfected as directed above.

Prevention of Enteric fever.—Architects and builders should provide for the ventilation of every house-sewer by a pipe running up outside the chimney stack, so high as to prevent injury to the occupants of the upper stories. Where the waste-pipe communicates with the drains, sewer-emanations are absorbed by the water in the cistern, and foul air admitted into the dwelling ; they should therefore be scrupulously trapped.

The ventilation of sewers thus becomes a matter of great importance, for, on account of the lightness of sewage gas, hurtful results have been shown to arise where sewers and drains are merely trapped inside, if provision has not also been made for the escape of gas at the highest elevation outside. At Croydon, some years ago, at the Orphan Asylum at Beddington, and again at Eastbourne, 1868–69, numerous cases of Enteric fever occurred from the absence of proper

sewer-ventilation. In some of these cases, the sewers and house-drains were found in good order and properly trapped; the water, also, was pure; the source of mischief being in the absence of outside ventilation for the house-drains. It cannot be too forcibly impressed upon architects and builders that sewage-traps are useless when the gas has reached a certain pressure, for it will force them. But with proper outside ventilation the communicating house-drains can never store in them as much sewer-gas as will suffice to force a properly-made trap.

As to the regular *flushing of drains* which has been recommended, Mr. Chadwick writes: Those who talk of drains or sewers being good which require to be regularly flushed do not know what good drainage is. Good tubular sewers or drains should be so constructed in size, form, and *inclination* to run off water, and thus to be self-cleansing, and to be always clear of deposit. Glazed earthenware socket-pipes, supplied with lateral sockets for junctions when necessary, are to be preferred. Brick drains are objectionable, as they allow of soakage.

There is also an important fact connected with drainage, pointed out very clearly and forcibly by Mr. Chadwick to the Council of the Society of Arts, viz., that *fresh* human excretæ are innocuous. Noxious decomposition begins in about four days in the sewer tank. Then it is, and there it is, in the distant tank or sewer of deposit, that danger arises. Stagnant sewage is putrid, and kills fish; whereas fresh sewage from self-cleansing drains and sewers discharged into rivers feeds them and augments their numbers. Hence the most effectual cause is not to combat with the gases after they have been produced, but to prevent their production—to prevent the formation of poison-pits, and the need of the various materials and services employed to counteract their malaria.

47.—Relapsing Fever (*Febris recidiva*)—Famine Fever.

Definition.—A continued fever, sudden in its invasion, accompanied by no eruption, lasting about a week, abruptly

terminating with excessive perspiration, then as abruptly returning from the fourth to the tenth day from the first attack and running a similar course. Several other relapses may follow.

This disease, called *Hunger-pest* in Germany, is not common in England, but has been epidemic in several cities and large towns. In the latter part of 1870, it was very prevalent and fatal in Liverpool, Glasgow, and other places where there was overcrowding. In 1873, it broke out in London, Nottingham, Manchester, and elsewhere. It does not occur in tropical climates, or on the Continent, except in some of the German territories and the Crimea, where it attacked our army during the Russian war. It has occurred also in North America.

Cause.—This is unknown; but its victims are almost universally in the lowest social rank—ill-fed, occupying crowded, filthy, ill-ventilated rooms and houses, and enjoying but few comforts. In the latter part of 1871, Relapsing fever again made its appearance in Liverpool, and spread rapidly in the crowded and dirty parts of the town. Indeed, it was almost limited to the class in which a single room serves as the abode of a family. It is in a very high degree communicable from the sick to the healthy, ranking next to Small-pox in the degree of contagiousness; the contagion being chiefly in the breath and exhalations. In this, and some other respects, it resembles Typhus. It is, however, seldom fatal, but old age, previously debilitating disease, Hæmorrhage, Jaundice, and other complications, may place the patient in great peril.

Symptoms.—The seizure is sudden: there are rigors and headache even more severe than those of the invasive stage of Typhus, but the prostration is much slighter. There are, also, pains in the muscles and joints, resembling those of Rheumatism. After a short time, violent reaction sets in, with great heat and pungency of the skin; frontal headache, throbbing in the temples, intolerance of light and sound, and sleeplessness; anxious expression of the countenance; rapid pulse—110 to 140; white furred tongue, at first moist but afterwards dry and brown; thirst, and, perhaps, vomiting of bile and gastric secretions, or even Jaundice. The tempera-

ture is from 102° to 107°; and at the height of the fever, Delirium may occur, chiefly at night. Sweating may come on without affording relief. About the seventh day from the commencement, the symptoms suddenly abate, the crisis being indicated by *profuse perspiration*, which has a very sour and peculiar odour. Sometimes a miliary eruption occurs; or minute ecchymoses over the trunk and limbs, or bleeding from the nose or bowel; Diarrhœa; menstrul discharge; after a few hours there is an abrupt cessation of all bad symptoms; the patient feels much better, and appears to improve rapidly for four or five days; when, on the fourteenth day from the first attack, a sudden Relapse occurs and there is a paroxysm of fever similar to the first. Perspiration again affords relief. A second, or even several relapses, sometimes occur, and convalescence is usually protracted. In other instances, however, uncontrollable vomiting, great thirst, very rapid pulse, Jaundice, Delirium, and death may terminate the case.

Sequelæ.—The most common are Pneumonia, Bronchitis, Hæmorrhages, excessive rheumatic pains in the muscles and joints; sometimes the kidneys are involved: the dangers are similar, in some respects, to those attending Scarlatina. A species of Ophthalmia, also Abortion, are frequent consequences. There is often sore throat, and one or both tonsils may be enlarged. Where Relapsing fever becomes epidemic, Typhus frequently accompanies or follows it, and persons whom the Relapsing fever has weakened not unfrequently fall victims to Typhus.

Treatment.—*Aconitum.*—Rigors followed by *feverishness*, in the first stage.

Bryonia.—Nausea, vomiting, and sensitiveness of the abdomen; sallow, anxious countenance; throbbing and heat of the head; *rheumatoid pains;* perspiration. It may follow *Acon.* or be alternated with it. Dr. Kidd, who had great success in an epidemic of the disease in Ireland, relied chiefly on *Bry.*

Arsenicum.—Watery Diarrhœa and vomiting; Œdema. A large number of cases were treated in Liverpool during the epidemic of 1870-71, when *Ars.* was found of special value

during the seizure, and *Nux Vom.* between the attacks. Where the rheumatoid pains were excessive, *Eupat.-Perf.* proved very useful.

Baptisia.—Typhoid symptoms. Dr. Dyce Brown found, when at Aberdeen, that it hastened the critical sweat; while *Acon.* was not of the slightest use. He also recommends the trial of *Hypo-sulphite of Soda*, five grains three times a day, to prevent relapse. He found it successful in several cases.

Gels., *China*, and *Podoph.* are sometimes required.

Phos., or *Ac.-Phos.*, during convalescence.

"Restlessness, Rhus T. When bone pains are very distressing, Eupat Per."

Prophylactics.—*Camphor* and *Nux Vom.*; also avoidance of the breath and exhalations as in Typhus.

Accessory Treatment.—Careful nursing is required. (See Section 38.) Light, nutritious food should be liberally administered, especially in the case of old persons, infants who are deprived of breast-milk, during and after the crisis, and in convalescence. Great cleanliness and frequent ablutions with tepid water are essential. Perfect repose aids recovery.

48.—Yellow-fever (*Febris flava*).

Definition.—A specific, acute, continuous fever, accompanied by Jaundice (yellow conjunctivæ and yellow skin); internal hæmorrhages (black vomit and black stools), pain about the epigastrium, severe headache and delirium.

This fever is a *specific* disease, and must not be confounded with fevers of a malarial type, or others in which yellowness of the skin, delirium, etc., also occur. It is described as the *hæmagastric pestilence*, is most dangerous and *malignant* in character, *rapidly fatal*, usually happens but once to the same patient, is *contagious*, and chiefly endemic in low districts on the sea-coast, and along the course of great or sluggish rivers, particularly where stagnant water abounds.

Cause.*—Infection. It is supposed to originate in the

* See Section 15 on "Sanitary Hints for Europeans in Tropical Climates."

rapid decomposition of vegetable matter in the tropics; and has even been attributed to Cyanogen formed in the mud of rivers by decomposition, similar to that which evolves marsh-gas in our own marshes and stagnant waters. In the West India Islands and some of the South American States, it is endemic, and is thence transported and propagated by contagion and by *fomites*. It is most frequently imported from ships which have touched at infected ports. It is the scourge of the tropics, and has occurred (by importation) in Plymouth, Southampton, Lisbon, and other sea-port towns; but has never been known to extend beyond 48° north latitude, nor without a temperature of at least 72° Fahr.

Predisposing Causes.—Non-acclimatisation. The recognition of this is of paramount importance. Residence in a cool climate predisposes the constitution to the disease. European blood cannot bear exposure to tropical heat with impunity. Hence the necessity for great caution when reaching a yellow-fever district. Overcrowding (as in barracks and ships), defective ventilation, and the accumulation of excreta around dwellings, greatly predispose to the disease.

Peculiarities.—Yellow-fever is specially fatal to drunkards, pregnant women, and children. It attacks persons with light hair and fair skin more readily than others. It is very mild when occurring in the natives of the tropics, also in Frenchmen, Italians, and Spaniards. It is more severe in the whites of North America, and still more so in Englishmen, and most fatal to Irishmen and Germans. It prevails mostly in the summer and autumn months. Its average duration is a week, and the most fatal period is from the third to the sixth day. Convalescence may be very protracted.

Symptoms.—These are not uniform. But after a period of incubation of uncertain length, varying from three or four days to as many weeks—during which there may be merely a little depression, loss of appetite, and nausea—a sudden chill, with violent rigor, pain in the head and back, and occasionally spasms of the lower extremity, usher in the *first stage*. The chill often occurs in the middle of the night, and is followed rapidly by intense fever, burning dry skin, pulse full, strong, and beating 120 to 140, or even more, persistent

high temperature (101° to 106°), great thirst, excruciating headache, backache, and pain in the limbs. The eyes are watery, burning, and red, as though irritated by pungent acrid smoke. The tongue seems thickened and flabby, is pointed at the tip when protruded, red at the edges and tip, and loaded with brown or yellow fur down the centre. There is extreme nausea, sometimes a good deal of bilious or mucous vomiting, and nearly always pain of the stomach on pressure. The kidneys are affected early in the disease, causing retention of the urine, which is often voided only in minute quantities, drop by drop. Costiveness is pretty constant. The patient craves cold water. The sense of oppression, the restlessness, and the facial expression—intensely sad or stern—are very remarkable. The mental condition varies from one of greatest apprehension to one of perfect apathy. Delirium is not infrequent. Indeed the gravity of the brain symptoms is noteworthy. In this stage, Yellow-fever resembles other severe fevers, but the appearance of the eyes, and the symptoms just mentioned, are strongly suggestive, particularly if the fever be endemic at the time.

In from twenty-four to sixty hours, the *second stage* is established. The symptoms have abated—fever gone, skin moist, tongue clean, and the patient sleeps. In mild cases, the fever often ends here, and good nursing leads to a rapid recovery. This, however, is the critical time. There is great depression of the vital powers, pulse falls from 140 to 70, or even 50. No matter how well the patient feels, he must be kept warm and quiet in bed, and on limited diet. The liability to relapse from indiscretion in diet, or from over-exertion, is very great. Careful nursing is all-important. (See Sec. 38.) The patient should not be left alone. The temperature of the room should be even. During convalescence, abscesses and eruptions on the face, and desquamation of the cuticle, are frequent.

Voracious hunger, with gnawing pain in the stomach, weight in the abdomen, acid risings, flatulent rumblings, frequent hawking up of mucus from the throat, constant wakefulness, and the appearance of a lemon tint in the eyes, point to the speedy approach of the *third stage*. At this period, an expres-

sion of apathy, anxiety, or despair, a wandering of the mind, and a very slow pulse, are of ominous import.

The *third stage* is marked by profound collapse; injection and yellowness of the eyes; burning in the stomach, ascending towards the throat; pain, sometimes severe, in stomach and bowels; dark-coloured urine and diarrhœa; increasing yellowness of skin; oozing of blood from the gums and throat, and even hæmorrhage from various organs; constant tossing about and sleeplessness; delirium, mild and muttering, or furious; eructations; hiccough; and frequent vomiting of yellowish brown or claret-coloured, or tarry-like liquid, or of mucus or phlegm mixed with brown or black specks, or of blood more or less pure. Unless the disease be arrested, the much dreaded black-vomit ensues, consisting of vitiated blood, and resembling coffee-grounds, or water in which snuff or soot is suspended to the consistency of thin molasses. Total suppression of urine, or reddish-dark urine, bluish or black patches on the skin, profound coma and convulsions, often precede death.

Epitome of Treatment.—

1. *First stage.*—Camph. (*chills and shivering*); Acon. alt. Bell. every hour (*intense fever and pain in the head*); Gels. alt. Bry., unless fever be much reduced in twenty-four hours; Cimic. (*rheumatic pains in back, limbs, and head*); Ipec. (*nausea or vomiting*); Ant.-T., should *Ipec.* prove insufficient; China (*prostration after hæmorrhage*).

2. *Second stage.*—Ars. and Merc. *alt.* 2 hours; Coff. (*nervous and restless at night*); China.

3. *Third stage.**—Ars. and Crotalus (*alt. 2 hours, interposing only such of the following remedies as are called for by urgent symptoms*).

4. *Incidental symptoms during third stage.*—

Vomiting.—Kreas. 3x or 1x, or Arg.-Nit. 3x (*two or three drops after each vomit*).

* H.M. Vice-Consul at Bolivar reports the successful use of a local remedy after other means had failed. The juice of the female *Vervain* plant, obtained by bruising, is given in small doses three times a day. Injections of the same juice are also administered every two hours until the bowels are completely relieved of their contents.

Urination painful, or suppressed.—Canth. (*highly coloured, red, or bloody*); Cann.-S. (*thick turbid urine, or stoppage by mucus*); Ac.-Sulph. (*hæmaturia*); Bell., Apis, Dig.

Diarrhœa.—Merc. (*bloody, followed by pain in rectum*); Ver.-Alb. (*crampy pain in small bowels*); Podoph. (*dark liquid evacuations*); Carbo Veg. (*putrid breath, vomit, and stools*); Ac.-Phos.

Uterine Hæmorrhage or Abortion.—Sabi. (*bright-red blood, or in early pregnancy*); Sec. (*dark coloured blood, or in later months of pregnancy*); Ham. (*slow oozing*).

Mental Symptoms.—Ign. (*intense depression*); Hyos. (*wild muttering delirium*); Stram. (*furious mania*).

5. *Convalescence.*—China.

6. *Preventives.*—Acon., Cimic., Bapt., Eucal., Crude Charcoal. Hot baths.

Leading Indications.—Dr. Lucius Morse observed the following symptoms during an epidemic at Memphis.

Gelseminum—Severe pains through the back and head, bruised feeling of the whole body, dulness of perception, thirst, full strong pulse, nausea, and vomiting.

Bryonia—Severe *pains upon motion*, with faintness on raising the head from the pillow, tongue dry and coated white, sense of expansion or compression in the brain, thirst for large quantities of water, *acidity of the stomach*, fulness and oppression in the bowels, *pain in the back and limbs*.

Belladonna—Head symptoms prominent, with *red or brilliant eyes;* purple or *congested face*, with or without delirium; tendency to *suppression of urine;* red, yellow, or turbid urine, with difficulty of emission; cramp-like pain in the stomach; painful heaviness and cramp-like heaviness in the loins and back.

Veratrum Viride—Congestion of lungs and stomach, with high fever, nausea, and vomiting; sensation as though the lungs could not be fully expanded; burning distress in the cardiac region; *hiccough*, with feeling as though a ball were lodged in the œsophagus.

Aconite—High fever, with *dry pungent skin;* tense, *rapid pulse;* great anxiety; intense thirst, but drinks little at a time; scanty, red, and hot urine; shortness of breath; bilious or greenish vomiting; restlessness and delirium at night; great debility.

Accessory Means.—The importance of cleanliness in so serious a contagious disease will be apparent. Discharges from the patient, and all soiled articles, should be quickly disinfected and removed, and the air of the apartment kept as fresh and untainted as possible. During the chill, a hot mustard foot-bath, repeated in a short time if necessary, often gives ease. A copious injection of warm soapsuds, to relieve the lower bowel, and frequent cold sponging of the whole body with tepid water acidulated with vinegar, to relieve the burning heat, are also advisable. The diet in this stage should be a few water-biscuits, soaked in weak black tea. In the second stage, rice, milk, and arrowroot, may be added to the diet. In the prostration of the third stage, iced cream or champagne, beef-tea, and wine-whey may be necessary.

During the whole course of the fever, the patient must remain in bed, comfortably, but not oppressively, covered. When the heat of the skin is moderated, frictions with hot linseed, or sweet oil, or with dry mustard, are useful.

Preventives.—Quarantine of ships, isolation of infected individuals, removal of predisposing causes, perfect ventilation and sewerage, disinfection, temperance, pure water, and proper food; also avoidance of great fatigue and exposure to the sun.

49.—Remittent Fever (*Febris remittens*).

Under this designation are included fevers varying in their symptoms and severity, and bearing different names, according to the marked character of some special symptom, or according to the localities where they prevail. Thus we have the *Gall-sickness* of the Netherlands, the *Walcheren fever*, the *Hungarian sickness*, the *Mediterranean fever*, the *Puka-fever*, the *Jungle-fever*, and *Hill-fever* of the East Indies, the *Bengal fever*, the *Bulam fever*, the African, Sierra Leone, Bight of Benin, and Fernando Po fevers, the *Bilious remittent fever* of the West Indies, the *Lake fever* of America, etc. They have been classified by Dr. Craigie and others in three varieties. (1) The autumnal remittents of temperate countries. (2) The summer and autumn remittents of warm countries. (3) The endemic

remittents of hot and tropical countries. The virulence of the fever varies with the nature of the climate; when it occurs in tropical climates it is most severe and fatal. It is manifested in all intermediate stages, from a severe form of marsh intermittent to malarious Yellow fever. But though there are differences in the symptoms, Remittent fever has in all varieties a few common characteristics.

Definition.—It is a non-infectious fever, accompanied by distinct but irregular exacerbations and remissions, which alternate for several days, increasing or decreasing according to the aggravation or amelioration of the disorder, until they are arrested by convalescence or terminate fatally. It should be observed that there is no cessation of the fever, but simply an abatement. It is accompanied by *great intensity of Headache*, the pain darting with a sense of tension across the forehead. There is also *functional disturbance of the liver*, and frequently *yellowness of the skin*. The *cause* is malarial.

Symptoms.—In addition to those stated in the definition :—An attack may come on *suddenly*, almost resembling that of the first stage of sunstroke, or be gradually accompanied by the usual precursory chills. The hot stage, or period of *exacerbation*, commences before or about noon and subsides before night, or the reverse ; there is much Headache, "a painfully acute state of every sense," great depression, lassitude, and great throbbing in the arteries of the neck ; also dry furred tongue, bitter taste, excessive thirst, tenderness at the epigastrium, and pain in the region of the liver.

Delirium, preceded by distressing giddiness, is a frequent accompaniment; when these symptoms are very marked, or there is lethargy or Coma, a severe form of the disease may be expected; there is also sometimes vomiting of colourless, bilious, or bloody matters. The paroxysms may terminate in from six or seven to thirty-six or forty-eight hours. Inability to sleep is most constant. The first exacerbation is the longest; but generally after twelve or sixteen hours the symptoms remit. The duration of the *remission* is as various as that of the hot stage; the second paroxysm is more severe than the first, and is not preceded by chills, etc., but the febrile phenomena are more marked. In bad cases there is

Jaundice; Hypochondriasis; typhoid symptoms supervene; black vomit, fœtid breath, convulsions, and death follow. In favourable cases, the disease shows signs of decline after the fifth exacerbation, sometimes terminates abruptly in an attack of perspiration, or by a short convalescence.

The great difference between Intermittent fever and Remittent, consists in the fever being *entirely* absent during the interval in the former disease, whilst it is only *partially* so in the latter.

Treatment.—The first and most immediate object is to lessen the force and frequency of arterial action, and shorten the period of exacerbation. This, to the Homœopath, is equal to prescribing *Aconitum;* and though that remedy has no specific relation to the blood-poison itself, it is capable of effecting the desired object.

Epitome of Treatment.—

1. *Precursory stage.*—Camph. (*chills*), Gels.
2. *Hot stage.*—Acon. and Bell.
3. *Advanced stage.*—Bapt., or Ipec. (*gastric disturbance*); Ars., or Ac.-Mur. (*typhoid condition*); Hyos., Bell., or Stram. (*Delirium*); Coffea (*sleeplessness*); Opi. or Rhus Tox. (*Coma or stupor*); Phos. or Merc. (*Jaundice*); Ars., Arg.-Nit., or Verat. (*excessive Vomiting, or black vomit*).
4. *During the remission.*—Quinine or China.
5. *Preventive.*—Gels.

Bilious remittents, Crot. H.

See also Sections on "Jaundice," and "Enteric fever." The "Accessory treatment" prescribed for "Intermittent fever" is in most respects suitable to Remittent fever.

50.—Intermittent Fever (*Febris Intermittens*)—Ague.

Geographical facts, collected by medical writers from Hippocrates downwards, show that every country is unhealthy, in proportion to the quantity of marshy or undrained alluvial soil it contains, the inhabitants of such districts dying often in the ratio of 1 in 20 instead of 1 in 38—the average mortality in healthy districts. The connection of a given class of

disease—represented by Remittent and Intermittent fever—with marshy districts is now distinctly established and generally recognised; also, on the other hand, the disappearance of this class of disease has always been in direct relation to the drainage and cultivation of the soil. Two centuries ago, Ague was a very fatal disease in this country. James I. died of it in 1625, Oliver Cromwell in 1658.

Definition.—Severe paroxysms of fever, ushered in by rigors, terminating in critical sweats, and recurring after an intermission of comparative health. By a paroxysm is meant the period of exacerbation, the hot stage of the disorder; by an *intermission*, the period between the paroxysms; by an *interval*, the whole period or cycle between the beginning of one paroxysm and the commencement of the next.

Temperature.—All the types of *Intermittent* are marked by this peculiarity: while the patient has a sense of cold, there is a marked, sudden, speedy increase of temperature, and a similar speedy decrease until the recurrence of the paroxysm. The temperature rises to 105° or 106·3°; rising and falling sometimes at the rate of 2° in ten minutes.

Types.—There are three chief types: (1) *The Quotidian*, has a paroxysm daily, an interval of twenty-four hours, and is most common in the spring; (2) *The Tertian*, has a paroxysm every other day, an interval of forty-eight hours, and is most frequent in the spring and autumn; (3) *The Quartan*, has a paroxysm every third day, an interval of seventy-two hours, and is most common in the autumn. The hours of the day during which the paroxysms occur are by no means uniform. The *tertian* is perhaps the most frequent, and has the most marked hot stage; but the *quartan* is the most obstinate. It is, however, remarkable as a general rule that the longer the cold stage, the shorter the paroxysm; and the shorter the interval, the longer the paroxysm. Thus the *quotidian* has the shortest cold stage but the longest paroxysm; the *tertian* a longer interval and longer cold stage with a shorter paroxysm; and the *quartan* with the longest interval has the shortest paroxysm. There is still another type in which, though there is an attack every day, those only resemble each other which occur on alternate days.

Laws.—Although at present ignorant of the physical or chemical nature of this *aërial poison*, we know that malaria obeys the following laws, which are worth remembering on account of their practical bearing:—1st. It spreads *in the course of prevailing winds*. When the wind blows across malarious tracts of land, the disease spreads in the direction of the current; while the inhabitants of the opposite district escape. 2nd. Its progress is arrested by *water*, especially by *rivers* and large *running streams*. Thus, persons on board ship, or at the side of water opposite to a marsh, are unaffected by it, although a favourable wind transmits the poison to a far greater distance by land. Water probably absorbs malaria; and it is a common opinion in India that water so charged produces periodic fevers in those who drink it. In like manner, thick *rows of trees* intercept the progress of the poison. 3rd. Malaria does not rise above the *low level*. It seems to be of greater specific gravity than atmospheric air, its power diminishing as we rise from the surface of the earth. Persons occupying the upper stories of a house in an infected locality suffer to a far less extent than those living on a ground floor. 4th. It is most dangerous at *night*. It has been often observed that sailors who go on shore in the day-time, when off a malarious coast, do so without any bad results; but that those who remain on the shore during the night are almost invariably affected.

Symptoms.—These may set in suddenly, or they may appear gradually, until a regular paroxysm occurs. The *first stage* comes on with a feeling of debility, weariness, chilliness, and rigors; then follow sensations as of cold water trickling down the spine and a shivering of the whole body; the teeth chatter, the nails turn blue, and the whole frame trembles, often with such violence as to shake the patient's bed. The face becomes pale, the lips blue, the features and skin contracted, and the papillæ of the skin are rendered prominent, giving it the appearance described as *goose-skin*, such as may at any time be produced by exposure to cold. The countenance acquires an anxious expression, the eyes are dull and sunken, the pulse frequent and small, the breathing hurried and oppressed, the tongue white, and the urine scanty and

passed frequently. After a time, varying from half an hour to three or four hours, the *second* or *hot* stage (*paroxysm* of genuine fever) comes on with flushings, until the entire body becomes hot, with extreme thirst, full bounding pulse, throbbing headache, and restlessness, the urine being still scanty, but highly-coloured. At length, after two, three, and even six or twelve hours, the *third* or *perspiring stage* succeeds, and the patient feels much relieved. Thirst diminishes, the pulse declines in frequency, and the appetite returns : at the same time, there is a red deposit of *urates* in the urine. The perspiration first breaks out on the forehead and chest, and gradually extends over the entire surface ; sometimes it is only slight, but at other times it is very copious, saturating the patient's linen and bed-clothes. A paroxysm usually lasts about six hours, allowing two hours for each stage.

Pathogenetic Effects.—All persons who live under the influence of malaria possess less heat-generating power than those who enjoy a more genial climate ; they also suffer from atmospheric changes which do not affect vigorous constitutions ; hence their liability to recurrence of attacks and to disorder of those functions by which malarial poison may be eliminated. From the recurrence of internal congestions in each cold stage, the functions of the liver, bowels, and sometimes the kidneys, are disordered ; the patient becomes sallow, his limbs waste, the abdomen is distended, and the bowels are constipated. The spleen is especially liable to be enlarged, sometimes attaining a weight of many pounds, when it can be felt externally. So characteristic is splenic disease, that M. Piorry, after observing more than five-hundred cases, records that the spleen is invariably enlarged during the progress of the fever, and that the disease is cured simultaneously with the subsidence of the enlargement, and that so long as the organ is abnormally large the fever is apt to recur. An enlarged spleen is popularly called *ague-cake*. Moreover, the disease often leaves the body so enfeebled, that ague may be reproduced by agencies which, under other circumstances, would produce no ill effects. Some of the symptoms, however, which are supposed to be due to malaria, are

with little doubt the effects of over-doses of *Quinine* or *Arsenic:* these have received the designation of—

Dumb-Ague.—The late Dr. Bayes has clearly shown that what Dr. Golding Bird describes in his work on Urinary Deposits, as *Dumb-Ague* with its "sallow aspect, depressed health, and visceral engorgement," is now known to be no Ague at all, but is, in reality, slow *quinine-* or *arsenical-poisoning*. The over-dosing with *Quinine* or *Arsenic*—not the Ague—is "the poison which remains in the system, and is continuing its work." Indeed, this is proved by Dr. Bird's own experience, for he proposed to cure the so-called "Dumb-Ague" by eliminating doses of *Acetate of Potash* and small doses of *Mercury*. In short, his teachings may be thus summarised:—*The most successful practice in the treatment of cases originally of Ague, where the patient has been slowly saturated with Quinine, consists in stimulating the liver by minute doses of mild mercurials, and the kidneys by mild diuretics, to enable them to eliminate and cast out the drug which has caused and is sustaining an artificial disease in the system.*

Causes.—Ague is called an *endemic* disease, because it is peculiar to a particular locality or country. The *exciting cause* is an exhalation of invisible particles from the surface of the ground, known by the term *malaria* or *marsh-miasma*. The *predisposing causes* are, fatigue, exhaustion, mental depression, insufficient or improper diet, intemperance, exposure to night-air, and previous attacks of Ague.

Epitome of Treatment.—

1. *Palliatives, during paroxysms.*—Ver.-Vir. or China (predominance of *chill* stage); Acon. (of *hot* stage); Ac.-Phos. (of *sweating* stage). The following remedies will also be useful: Chin.-Sulph., Ipec., Carbo Veg., Eup.-Pur. The symptoms should also be mitigated as they arise, by imparting warmth during the cold stage, removing the patient's coverings and giving cooling drinks during the hot; and supplying him with *warm, dry* linen when the perspiring stage has passed.

2. *Curatives, during intermission.*—China, Ars., Carbo Veg., Nat.-Mur. (*great thirst, bilious vomiting, blistered lips*), Ced., Nux V., Eup.-Pur., etc.

3. *Sequelæ.*—Merc.-Biniod. (*enlarged spleen*) internally and

as an ointment over the gland; Phos. (*deranged liver; bronchial catarrh*); Ac.-Phos. (*prostration, anxiety* of the face).

4. *Overdosing by Quinine and Arsenic* (*Dumb-ague*).—Ipec., Carbo Veg., Ced., Sulph. ϕ.

The *Curative* treatment is of the highest importance, the object being, not directly to arrest the paroxysms, but to bring about such a healthy condition of the system that the disease may gradually decline. Sometimes it is necessary to persevere for weeks with the appropriate remedy, and not to change it frequently, or at all, if the paroxysms occur at later periods of the day, and become less severe.

Special Indications.—*China.*—Recent cases, especially in *aguish districts*, when the symptoms are well defined, take place in the regular order, and with an intermission of comparative health. The symptoms are—*yellowish complexion;* drowsiness after a meal; sinking, empty sensation, without hunger, or hunger easily satisfied; soreness or *swelling of the liver or spleen;* watery, slimy, or bilious *Diarrhœa;* extreme sensibility to currents of air; depression and irritability. If preferred, a trituration of *Chin.-Sulph.* 1x may be used in grain doses; or four grains of *Quinine* with one drop of *Sulphuric Acid*, may be put into a four-ounce bottle of water, well shaken, and a dessert-spoonful taken as a dose, every four or six hours, one being administered an hour before a paroxysm is expected. Should *Quinine* have been administered in excessive quantities, *Ars.*, *Carbo Veg.*, *Cedr.*, or *Nat.-Mur.*, may be substituted.

Arsenicum.—Chronic Ague; irregular forms, when the stages are not clearly marked, as in simultaneous or alternate shivering and heat, or internal shivering with external heat; *burning heat; insatiable thirst; great debility;* tenderness of the liver and spleen; nausea; *violent pains in the stomach;* great anxiety; *dropsical* tendency; danger of running into *Remittent* fever; also when *Quinine* has been used in excess. In *Brow-ague* occurring in marshy districts, *Ars.* is also very efficacious. A dose every four hours between the paroxysms, if they occur daily, or once in six or eight hours if they occur every second or third day.

Ipecacuanha.—Nausea, Vomiting, and other *gastric disturb-*

ances, with a thickly-coated, yellowish, moist fur on the tongue.

Cedron—Is considered to be a true anti-periodic, and in simple Intermittents is believed to be infallible; paroxysms exact in reappearance at the same hour of the day. It is also recommended for regularly-recurring paroxysms of Neuralgia.

Natrum Muriaticum.—Chronic Intermittents, with bilious Vomiting before and during the chill, great thirst, *blistered lips*, and *sores about the mouth.* It is in high repute in America.

Carbo Veg.—Is recommended when the cold stage has greatly predominated. We have found it valuable in *chronic cases*, and have witnessed its power in preventing a recurrence of the disease. We have also proved it to be curative of the artificial disease induced by over-doses of Quinine—the *Dumb-ague* before referred to.

"Chill between the shoulders, symptoms aggravated by eating or drinking, *Caps.* 3. Thirst before chill (which usually occurs in the morning), bilious vomiting during paroxysm, scanty perspiration at close, bone pains, *Eup. Perf.* 3x. Non-malarial cases, attack coming on in afternoon, no thirst, sensation during chill as if hands were dead, Apis 3x. Enlarged and painful spleen, *Ceanothus* 1." (*J. H. Clarke.*)

Accessory Means.—Removal to a healthy locality is one of the first and most essential points, and is often immediately attended by marked improvement. If compelled to remain in an aguish district, patients should not go out-of-doors in the evening, or too early in the morning—at least, not before taking breakfast; they should sleep in the loftiest part of the house. Sunlight and air should be freely admitted during the middle of the day, but night-air carefully excluded. Fatigue should be avoided; also sitting or standing in a current of air.

Diet.—On the days during which the fits occur, the food should be light, taken in small quantities, and great dietetic precautions observed until the paroxysms entirely disappear. Gruel, arrowroot, tapioca, sago, or corn-flour; mutton or chicken broth, or tender meat, may be taken in the intervals between the fits. Cold water *ad libitum.*

PREVENTIVES.—*China* morning and night during the prevalence of the disease in aguish districts. When compelled to be in a malarious atmosphere early in the morning or late in the evening, a good *respirator* should be worn; or, in the case of men, the beard should be cultivated. Immunity may also be secured to a great extent by *keeping the mouth shut*, and breathing only through the nostrils.

51.—Simple Continued Fever (*Febricula*).

DEFINITION.—A complex morbid condition which is characterised by high temperature, rapid pulse, muscular debility, languor and general functional disturbance.

As the term *Fever* (from *fervere*, to be hot) implies, the most prominent and first-recognised feature is increased heat. This condition accompanies many diseases as one of their phenomena. When they run a more or less definite course without a local manifestation they are called *specific*, *primary*, *idiopathic*, or *essential* fevers; such are Typhus and Enteric. When they are marked by local inflammations they are termed *secondary*, *symptomatic*, or *sympathetic* fevers; such are Phthisis, Abscess, etc.

Fever may also be of an *ephemeral* character, dependent on some cause which is merely sufficient to produce febrile disturbance without further mischief, as *Simple Continued fever* or *Febricula*.

Sometimes it is contagious; generally not so.

CAUSES.—Great, sudden changes of temperature; long exposure to the sun; damp linen or houses; poor or insufficient diet, or, on the other hand, overfeeding; inebriety; injuries; mental or bodily fatigue or excitement, or any circumstances which shock the nervous system; the action of specific poison, as of Enteric or Typhus. It may also be associated with various local or functional disturbances, as bronchial or gastric Catarrhs, Milk fever, etc. Sometimes there is no evident cause.

DURATION.—This fever lasts from one to three days, or longer. When the symptoms disappear in twelve or twenty-four hours, it is said to be *Ephemeral*. But severe forms of

the disease may be the precursors of *Typhus*, *Pneumonia*, *Acute Rheumatism*, etc.

Symptoms.—Simple continued fever is usually ushered in by chills, or alternate chills and flushes, followed by burning heat and dryness of the skin; full, quickened pulse; dryness of the mouth, lips, and tongue—the tongue being red or coated white; thirst; high-coloured, scanty urine; and Constipation. These may be accompanied by pains in the loins, Headache, loss of appetite, hurried breathing, Delirium, etc. Most of the symptoms are usually more severe at night. *Profuse perspiration*, bleeding of the nose, copious discharge of urine, Diarrhœa or herpetic eruptions, are generally associated with the decline of the fever, and the patient is left weak, but otherwise well.

Temperature.—The rise is rapid, and may reach 102°, 103°, or 104°, in the course of a few hours. This high temperature, however, does not last long, perhaps a few hours, or a day or two, then rapidly declines. If it fall in 24 to 36 hours, accompanied by the favourable symptoms just referred to, convalescence is at hand.

Treatment. — *Camphor.* — *Sudden seizure of chilliness; shivering*, with lassitude, and general indisposition which has come on rapidly. Two drops of the strong tincture of *Camphor* on a small piece of loaf-sugar, or two or three pilules, repeated every fifteen minutes, three or four times.

Aconitum.—Alternate *chills and flushes, hot* and *dry skin*, sneezing, etc. A dose every two hours, or in urgent cases, every thirty or forty minutes, until the skin becomes moist and the pulse less frequent. Should the attack be one of *Simple* fever merely, or even the precursor of a more severe disease, this is still the best remedy at this stage.

Belladonna.—Redness of the face; *violent Headache;* confusion of ideas; a wild, fiery appearance of the eyes; *throbbing of the blood-vessels* in the temples; wakefulness, nocturnal Delirium, or other *cerebral symptoms.* It may follow or be alternated with *Acon.*

Bryonia.—Heavy stupefying Headache, aggravated by movement, with a sensation as if the head would burst; Cough and oppressed breathing; oppression at the pit of the

stomach, yellow-coated tongue, nausea, Constipation, brown or yellow urine; *shooting pains in the limbs;* irascibility.

Arsenicum.—Severe or prolonged cases of *Febricula*, with much *prostration*, especially when the symptoms have a *periodic* character, or occur in feeble patients.

"*Baptisia.*—Continued fever with bilious or gastric symptoms."

If the symptoms do not yield to the remedies prescribed, but increase in severity when they are expected to be declining, the case will probably prove to be one of Enteric fever.

Accessory Treatment.—The patient should be protected from too much light, heat, noise, company, too many or thick bed-coverings, and everything likely to cause excitement or prevent sleep. In the early stage of the fever, the adoption of the *hot foot-bath*, or the *wet-pack* (see Sec. 32), often restores the equilibrium of the system, or, at least, hastens the cure. Water should be the principal beverage, given in small, frequently-repeated draughts; it encourages perspiration, and promotes the favourable action of the baths just prescribed. In acute fever, cold water is like the "Balm of Gilead."

52.—Dengue (*Denguis*).

Definition.—An Ephemeral, continued fever, epidemic and perhaps infectious, accompanied by an exanthematous eruption resembling Measles, severe frontal headache, and distressing rheumatic or neuralgic pains in the trunk, limbs, and joints. On account of the stiff and awkward gait of patients labouring under it, it is called Dandy-fever.

The disease gives rise to complications, but is seldom fatal. It lasts from eight to ten days, or for several weeks; relapse is common; but an attack secures future exemption.

It is not known as an epidemic in Great Britain, but has been prevalent in the East Indies, the West Indies, and the Southern States of America. It is known as *Dandy*-fever in the West Indies, as *Breakbone*-fever in Philadelphia, as *Eruptive Rheumatic* fever elsewhere.

Symptoms.—The attack is very sudden, commencing with vomiting, headache, and pains in the back, limbs, and joints; rigors are not uncommon. There is painful swelling of the joints, and often of the lymphatic glands of the neck, axilla, and groins; also of the testicles. The severe headache is accompanied with pain in the eyeballs. The skin soon becomes hot and dry; the pulse rapid or infrequent, small, and feeble; the face is flushed; the eyes are red and watery; the tongue is red and clean; the appetite is lost, while there is great thirst; the bowels are torpid. Sometimes there are violent cramps in different parts of the body. About the end of the third day there is a remission of the fever, which lasts from two to four days, when the nausea, heat, and muscular pains return, accompanied by an eruption. This appears in the form of a scarlet efflorescence, first on the palms of the hands, then on the whole body, affording relief to the febrile symptoms. It is, however, far from uniform in its appearance, simulating Measles, Scarlet fever, Chicken-pox, or Herpes, often with a mixture of the forms. Unless there be complications, the complaint then gradually subsides in course of about a week, leaving the patient physically and mentally depressed, and often with neuralgic and muscular pains.

Epitome of Treatment.—Acon. (*inflammatory symptoms, pain,* and *early arthritic symptoms*); Bry., Rhus (*rheumatic swelling, tenderness, and pain of the joints, development of the eruption*); Gels. (*muscular pains*); Ver.-Alb. (*cramps in different parts of the body*); Merc., Clem. (*painful swellings of the neck, axilla, groin, and testicle*); "Eup. Perf. (*severe bone pains*);" Phyto., Ars., Sulph. (*sequelæ and during convalescence*).

53.—Simple Cholera (*Cholera Simplex*)—English Cholera—Sporadic Cholera.

Definition.—An acute catarrhal inflammation of the mucous membrane of the stomach and intestines, accompanied by *nausea, vomiting, and purging,* the discharges being *bilious* (distinguishing it from malignant Cholera, in which the discharges are not bilious), and which, if unchecked, may be followed by *Cramps* in the stomach and bowels, and

collapse. It occurs from occasional causes and in single or scattered cases; hence it is called *sporadic*.

Summer Diarrhœa,—the Diarrhœa prevalent in autumn and in hot weather generally, is of the same character, and requires similar treatment.

Epitome of Treatment.—Camph. (*with chills*); Ipec. alt. Coloc. (*severe griping or Cramps*); China (*simple diarrhœtic evacuations with griping*); Ver.-Alb. (*sudden and violent attacks of Vomiting and watery Diarrhœa, even with Cramps and collapse*); Iris (*bilious motions with colicky pains*); Ars. or Acon. (*collapse*).

For further details see the Section on "Diarrhœa," from which it is distinguished by not being a local but a general disease. See also next Section for differences between Asiatic and Simple Cholera.

54.—Asiatic Cholera (*Cholera Asiatica*)—Malignant Cholera (*Cholera pestifera*).

In this disease, which resists the efforts of the old system of medicine, Homœopathy has won brilliant triumphs. Its success in the prevention and cure of Cholera, and other violent diseases, has contributed greatly to its popularity in every part of the world. A Parliamentary return, dated May 21st, 1855, entitled "Cholera," testified that by the Homœopathic treatment of Asiatic Cholera in hospitals, the death-rate was 16·4 per cent., while according to the aggregate statistics of the other (Allopathic) hospitals, it was 59·2 per cent.*

Definition.—A specific malignant disease, characterised by coldness of the surface, spasms and cramps, vomiting, profuse serous purging, and collapse similar to asphyxia.

It is perennially endemic in India, and is thence propagated and becomes epidemic by means of contagion and atmospheric currents. Its diffusion appears to depend on certain meteorological conditions—a warm, moist, stagnant, and oppressive condition of the atmosphere—and on certain local conditions

* In an article, July 28th, 1866, entitled "Cholera in the Metropolitan Hospitals," the *Lancet* states: "It is a melancholy fact to record, but at the time of our last visit no case of undoubted Cholera had recovered."

of soil, depression below high-water mark, humidity, and presence of decaying animal matter. Its duration and intensity, when epidemic, are marked by periods of increase, culmination, and decline; the mortality is greatest during the time of invasion and increase; the virulence seems to diminish as the malady slowly passes away from the infected locality. Young children, old persons, the fatigued, the anxious, the strumous, the anæmic, the intemperate and profligate, the sick, and the convalescent, are the surest victims: young persons from fifteen to twenty years of age are the most likely to recover.

Table of Differences between Asiatic Cholera and Simple Cholera.

ASIATIC CHOLERA.	SIMPLE CHOLERA.
1. Is preceded by *painless* Diarrhœa.	1. The seizure is *sudden.*
2. *Not* directly traceable to error in diet.	2. Is generally traceable to some *error in diet.*
3. *Shooting pain* down the *thighs* is the pain first noticed.	3. *Colic in abdomen* is the pain first complained of.
4. *Prostration is rapid and overwhelming*, out of all proportion to the evacuations.	4. Prostration is *gradual*, and less marked than the vomiting and purging.
5. *Rapid* reduction of the temperature of the *surface of the body* several degrees below the normal standard.	5. *Gradual* reduction of the surface temperature.
6. At the same time, if introduced into the *internal cavities*, the thermometer shows a high *fever temperature.*	6. The thermometer *never* shows the internal temperature above the normal heat.
7. Evacuations resemble *rice-water* almost from the *first.*	7. Discharges are strongly *bilious*, causing burning and smarting pain, and only *colourless at the very last.*
8. Cramps commence in the *fingers* and toes, and extend along the *arms* and legs.	8. Cramps commence in *abdomen*, and rarely affect the *upper limbs.*
9. The veins become congested; the tongue, lips, and extremities being livid purple, the colour first appearing at the roots of the nails.	9. No congestion or lividity of the surface.
10. Urine is *albuminous.*	10. Urine *is not* albuminous.

Cause.—Pathologists are not yet agreed as to the exact character of the *materies morbi;* but are unanimous in regarding the disease as a most serious one. In India and other Asiatic countries, it is especially sudden and fatal. Instances of death in two, three, four, or more hours, are extremely common. The experience gained during former visitations of Cholera teaches us that it seizes the poor in a far greater proportion than the rich, that the most potent conditions favourable to its spread are poverty, overcrowding, filth, intemperance, and *impure water;* and that as we prevent the accumulation of filth, foul air, and other causes of general disease, and supply the people with wholesome food and pure water, so we render inoperative the powerful agencies by which this dreaded disease chiefly spreads.*

Symptoms. — *The First,* or *Premonitory Stage.* — This is often absent, or apparently so, the only symptoms being unobserved loss of heat and feebler circulation, together with watery diarrhœa, the more insidious and dangerous because *painless.* Otherwise the invasion of the disease is to be recognised by lassitude, giddiness, nausea, weight and uneasiness about the pit of the stomach, diarrhœa and vomiting, which are probably the efforts of nature to expel the poison.

The Second, or *Cold Stage.*—This often appears without warning; the patient may be sleeping soundly and then be suddenly seized with unaccountable vomiting and purging. Dr. Sutton reports that more persons are attacked between twelve and three o'clock in the morning than at any other hours. There is then rapid prostration and faintness, accompanied by intermittent pulse, contracted pupil of the eye, intense thirst, severe griping and burning sensation in the stomach, spasms in different parts of the body, cramps, especially down the thighs and calves, rendering the muscles knotty and hard, discoloration and wrinkling of the extremities,

* In 1865, the French Government instituted an inquiry into the means by which Cholera was developed and propagated, and found the most important to be the annual Mahommedan pilgrimage to Mecca, and the crowding together of the pilgrims in the most unhealthy conditions and circumstances.

coldness and dampness of the whole surface of the body, cold tongue and breath, vomiting, and copious and incessant serous (rice-water) purging. "When the maximum external temperature remains throughout below the normal average, the case will probably be fatal." Great differences between the axillary and rectal or vaginal temperature are also decidedly unfavourable. The latter has been observed as high as 108·32°.

The Third Stage, or *Collapse*.—The pulse is scarcely perceptible; the lips purple; the tongue cold, slightly furred, livid; the eyes sunken, red, injected, cornea flattened, pupil dilated, conjunctivæ white and glassy; the countenance livid, emaciated, anxious, ghastly, every feature sharp and pinched (*facies choleritica*); the voice is altered to a low, feeble, unnatural sound; breathing painfully difficult; sense of oppression and desire to lie uncovered; extreme restlessness, wakefulness, apathy; craving thirst; urine albuminous or suppressed; perspiration cold and clammy; purging stopped; collapse; death. Dr. Sutton reports that the largest number of deaths take place between the hours of 7 and 11 a.m. and 7 and 11 p.m. It is important to note these critical hours in the treatment of the disease.

Favourable Symptoms.—If the patient survive eighteen hours after attack with the cold stage, there are frequently signs of amendment. In India there is rapid recovery; in Europe there ensues a febrile stage. Pause in the disease is shown by sound refreshing sleep, easier respiration, freer pulse, warm perspiration, and return of the powers of life. The European in India is liable to reaction in the form of Remittent fever, which may terminate fatally. In Europe, though the whole series of symptoms be ameliorated, the improvement may be only temporary, and fatal relapse may ensue. Or if there be a febrile reaction, it assumes generally a typhoid, occasionally an intermittent, form. If this be mastered, or if there be only a mild febrile reaction, the patient recovers after a longer or shorter period. "If the temperature in the axilla be 92°, and in the rectum 102°, the patient is still in collapse; but if the temperature in the axilla be 95° or 96°, imperfect reaction may be commencing."

Epitome of Treatment.—

1. *Premonitory Diarrhœa.*—Rubini's Camph.*

2. *Invasive stage.*—Rubini's Camph., or Acon. (strong tincture in drop-doses).

3. *Fully developed Cholera.*—If Camph. be insufficient—Ars., Ver.-Alb., Cup.-Ac., Ipec., Amm.-Sulph.

4. *Collapse.*—Ars., Acon., Carbo Veg.

5. *Typhoid conditions.*—Phos., Ars., Carbo Veg., Ac.-Nit., Cupr.-Ac.

6. *Convalescence.*—China, Ac.-Phos.

7. *Prophylactic.*—Camph., Cup.

General Indications.—*Camphor*, at frequent intervals, directly the first symptoms of Cholera—Diarrhœa, *chilliness*, and *spasmodic pains* in the abdomen—are noticed. It is often sufficient to cure the disease *immediately* in that stage. It should be given on small lumps of sugar. Should the disease have much advanced before the use of *Camph.*, *Aconite* should be administered.

In the third edition of Raue's "Pathology and Therapeutics," the author says, in speaking of "Camphor": "I must here put in a word of warning against overdosing with Camphor. Camphor in an overdose will do harm, and may even kill as well as Cholera, and in a very similar manner, and just herein lies its homœopathicity to Cholera. If, when taken as a preventive or during reconvalescence, precordial anxiety, coldness, and bluishness of the skin, its use must be discontinued at once, or the dose diminished. *Coffea* or *Opium* are its antidotes."

Aconitum.—Dr. Hempel found this remedy eminently useful, during the first invasion of the disease, in restoring the pulse and rousing the vital reaction generally. The 1x, or strong tincture, should be given. This, too, was our own experience with *Acon.*, during the epidemic of 1866–67, when we prescribed it in several cases of Diarrhœa with great pain in the bowels, coldness of the body, and cadaverous appearance.†

* *Rubini's Camphor* consists of equal parts by weight of *Camphor* and of *Spirits of wine*, 60 degrees over proof, when it will dissolve and hold in solution its own weight of *Camphor*.

† We prescribed, for a patient at a few miles' distance, *Acon.* in a low dilution for severe pain in the abdomen. The medicine produced such

Arsenicum.—Cramps, suppressed urine, and *sudden extreme prostration*, the last symptom being more marked than the profuseness of the discharges. A dose every thirty to sixty minutes.

Veratrum.—Excessive Vomiting and Diarrhœa, with Cramps.

Cuprum.—Cramps, and a *cyanotic* condition.

The remedies most suitable in Collapse and in the Typhoid Condition into which Cholera patients often pass, have already been indicated. For detailed symptoms, see the *Materia Medica*, and the Section on *Enteric fever*.

Accessory Means.—*Absolute rest*, in the recumbent posture, from the very commencement of the Diarrhœa. A *hopeful and cheerful state of mind* should be fostered,—a presentiment of death being unfavourable.

Fresh air should be freely admitted to the sick-room, which, however, should be kept comfortably warm. The external heat of the body should be maintained as much as possible by friction, by hot bricks, hot bottles, hot bags of salt or bran applied to the abdomen, legs, and feet. Ice may be given *ad libitum*, to be either dissolved in the mouth or swallowed: iced water is refreshing: no food is required: stimulants are worse than useless: enemata of warm milk, often repeated though rejected, are beneficial. On the occurrence of favourable symptoms, farinaceous preparations may be given in small quantities frequently, to be followed by broths and soups; but great care must be taken not to arrest recovery by injudicious feeding. Ultimately, suitable clothing should be provided, and every precaution taken against extremes of temperature and changes in the weather. All discharges from the first should be received into some disinfectant; bedding and clothes should be carefully disin-

striking results in his own case, that, having a considerable portion to spare, he gave doses of it to his friends when they suffered in a similar manner. Finding the remedy most useful in relieving acute pain, he asked us to give him a supply of it to keep in readiness. At the time Cholera had broken out in the village, and, although he did not know the name of the remedy, he gave it to as many as he found suffering from Cholera, taking the pain in the abdomen as the indication for its use. Death from Cholera occurred in the village, but in every instance patients who had *Aconite* quickly recovered.

fected.* C. G. Raue, in his third edition of "Special Pathology," says: "The prognosis is very bad under allopathic treatment, 50 per cent. and more, as the last epidemic of 1884 in France and Italy has shown again. The deaths under the homœopathic treatment amounted even under the most unfavourable circumstances to only from 8–12 per cent. at the highest. Four homœopathic physicians in Naples, Drs. Rubini, Cigliano, Mucci, and Orioli lost in the same epidemic but 0·15 to 1 per cent."

Preventive Treatment. — When Cholera is epidemic, *Rubini's Camphor* should be taken once or twice a day, in doses of two or three drops on sugar. The *simple diarrhœa* which often precedes Malignant Cholera should be promptly met. *Camph.*, *Ars.*, or *Acon.* may be prescribed according to the indications. The patient should remain in bed for two or three days after the diarrhœa is arrested, even though he should feel quite well.

Sanitary and Hygienic Measures.—The following excellent advice has been given, and should be adopted on the earliest indication of Cholera :—

The house should be well aired, especially the sleeping apartments, which should be kept dry and clean.

All *effluvia* arising from decayed animal or vegetable substances ought to be got rid of; consequently, *cesspools and dust-holes should be cleaned out, and water-closets and drains made perfect.* Ferri.-Sulph., Cupri.-Sulph. (not Acetic Acid), Carbolic Acid, or other disinfectants, should be liberally used. Zinci Sulph. is preferable for the disinfection of linen.

All exposure to cold and wet should be avoided, and *on no account should any one sit in damp clothes, particularly in damp shoes and stockings. Care should be taken to avoid chills or checking perspiration.* Clothing must be sufficient to keep the body in a comfortable and even temperature.

Habits of personal cleanliness and regular exercise in the open-air should be cultivated; also regularity in the periods of repose and refreshment; anxiety of mind, late hours, and fatigue of body and mind should be avoided.

* See Sections on "Nursing" and "Sanitary Hints for Europeans in Tropical Climates."

The diet should be wholesome, and adapted to each individual habit. *Every one should, however, be more than ordinarily careful to abstain from any article of food (whether animal or vegetable) which may have disordered his digestion upon former occasions, no matter how nutritious and digestible to others, and to avoid all manner of excess in eating and drinking.*

Raw vegetables, sour and unripe fruits, cucumber, salads, pickles, etc., should not be allowed.

Wholesome varieties of ripe fruits, whether in their natural or cooked state, and vegetables plainly cooked, may be taken in moderation, by those with whom they agree.

55.—Diphtheria (*Diphtheria*).

Definition.—A specific, contagious, and sometimes epidemic disease, due to toxæmia, in which there is a peculiar sore throat, characterised by the exudation of lymph on the lining of the mouth, fauces, and upper part of the air-passages, or occasionally on an abraded portion of the skin, attended with general prostration, and sometimes remarkable nervous phenomena.

As just described, it is a blood disease, manifesting local distinctive symptoms. It would be incorrect in theory, therefore, and might lead to grave errors in treatment, if the constitutional disturbances were regarded as the effects of the physical changes about the throat. Attention would thereby be directed to the mischievous result rather than the systemic poisoning which caused it. It is true that, as in some other disorders, the patient may die from the local lesion, but it must not be forgotten that we have to cope with the general disease.

It is known as *Malignant Quinsy* and *Putrid Sore Throat;* affects children more than adults; and is most common among the poor, and residents in damp situations and badly drained houses. With all our sanitary improvements of recent years this disease does not decline as we might expect. By the Registrar-General's report for 1890 the number of deaths given is 5,150, or in proportion of 179 to a million of persons

living, a proportion somewhat lower than that recorded in 1889, but nevertheless above the average of recent years.

Symptoms.—Diphtheria is divisible into two classes, simple and malignant. In the *simple* variety, happily the most common, the symptoms are at first so mild as to excite little complaint beyond slight difficulty of swallowing, or pain in the throat, burning skin, pains in the limbs, etc., and is readily cured by one or more of the following remedies. *Malignant Diphtheria* is ushered in with severe fever, rigors, vomiting, or purging, sudden great prostration, and restlessness, anxious countenance, etc., which point to some overwhelming disease, under which the system is labouring. The skin is hot, the face flushed, the throat sore, and the mucous membrane bright-red; the tonsils are swollen, and grey or white patches of deposit appear on them, small at first, but gradually enlarging, so that one patch merges into another, forming a false membrane in the throat, rendering swallowing and even breathing difficult. In some cases, the false membrane has been detached, and after extreme efforts, ejected, presenting nearly an exact mould of the throat. The exudation of Diphtheria may be distinguished from a slough by its easily crumbling, by the facility with which it can often be detached, and by the surface thus exposed being red, but not ulcerated. The false membrane looks like dirty wash-leather; and between it and the true membrane an offensive bloody discharge exudes, imparting to the patient's breath a most repulsive odour. The glands of the neck are always enlarged, sometimes pain is felt in the ear, and there is generally stiffness of the neck; the inflammation is liable to extend rapidly, in consequence of the continuity of the lining membrane of the throat with the mouth, nose, wind-pipe, and even the air-tubes of the lungs. If the disease progress, the patient passes into a stupor, and the difficulty of swallowing or breathing increases, till the false membrane is forcibly ejected, or the patient dies from suffocation, the exudation blocking up the air-tubes; or, more frequently, he sinks from exhaustion, similar to that observed in *Enteric fever*.

Dangerous Symptoms.—Increased fœtor of the breath, a quick, feeble, or very slow pulse; persistent vomiting; drowsi-

ness and Delirium; bleeding from the nose; extension of the disease to the lining of the nose; dyspnœa; suppressed, or albuminous urine; increase of temperature.

Diagnosis.—Some have thought that Diphtheria was only *Scarlet fever* without an eruption; but, although there is some analogy between these diseases, further investigation has shown that they are distinct. In Diphtheria, the fever is from the first of an asthenic type, whilst such a condition is an exception in Scarlatina. An attack of either confers no exemption from the other. The after-effects of Diphtheria are of a severe *nervous* character; those of Scarlatina involve mischief in the kidneys or the chest.

Temperature.—The clinical thermometer is of great service in this disease, especially in the case of children, who cannot describe their ailments. The temperature rises with the increase of the disease, and prognosticates an unfavourable termination. On the other hand, recovery may be anticipated when the temperature is diminishing, even though there be no other sign of improvement.

Causes and Mode of Propagation.—Impure air, from *imperfect drainage*, living too near manure-deposits, slaughter-houses, or where animal substances are in a state of *decomposition*. It commonly occurs as an *epidemic*, and a solitary case may prove a centre for spreading the disease. The severity of the attack seems to depend as much on the health of the patient as on the character of the infecting source.

Sequelæ.—After a short period of convalescence—a few days to one or two weeks—sequelæ are apt to arise, usually of disordered innervation, varying from defective nervous power in one or more sets of muscles, to a more or less perfectly defined *Paralysis*. Nerves about the throat, the seat of the local manifestations of the disease, are especially liable to suffer, causing chronic difficulty of swallowing, Hoarseness, etc. The most alarming is loss of nervous power of the heart, with feebleness of action, or, in extreme cases, complete cessation. But recovery from the sequelæ is not infrequent, though it is generally tedious.

DIFFERENCES BETWEEN DIPHTHERIA AND CROUP.

DIPHTHERIA.	CROUP.
1. There is a *premonitory illness*—shivering and fever, with sore throat—without premonitory cough.	1. There is a *premonitory, hoarse, metallic cough*, without premonitory illness.
2. Is dangerous *chiefly per se;* in addition to this it is dangerous on account of its *local* lesion; the production of a false membrane presenting an additional danger.	2. Is only dangerous on account of its *local* lesion.
3. The throat-affection begins in the pharynx and may *pass downwards* along the respiratory tract.	3. This disease is sometimes preceded by catarrhal symptoms which *extend upwards* from the chest to the larynx.
4. Diphtheria being a blood-poison, and attended by great general depression, the treatment must be directed to *combating the systemic mischief.*	4. Croup being a local disease, the treatment consists mainly in *subduing the local symptoms.*
5. Attacks adults as well as children.	5. Is a child's disease.
6. Distinguished by a false membrane.	6. Characterised by tenacious mucus nearly as viscid as pneumonic sputa, covering the swollen membrane.

EPITOME OF TREATMENT.—

1. *Mild cases.*—Acon., Bell., Hep.-S., or Bap. at the commencement; afterwards, if necessary, Merc.-Iod., or Ac.-Nit.

The treatment recommended in the Sections on *Quinsy* and *Croup*, is often sufficient in Diphtheria, if used early.

2. *Malignant Diphtheria.*—K.-Permang., Ac.-Mur., K.-Bich., Ars., Ammon.-Carb.

3. *Sequelæ.*—Phos.; Phyto. (*Hoarseness, etc.*); Merc.-Cor. (*pain in ulnar nerve; weakness and faintness; weakness of the heart's action*); Dig. (*enfeebled heart*); Chin. or Quin. (*debility*); Coni., Gels., Rhus, Sulph.

SPECIAL INDICATIONS.—*Belladonna.*—Mild cases rapidly recover, and more severe cases often yield, under this remedy, when perseveringly administered in the 1x dilution. Hughes recommends a freer resort to the aid of *Bell.*, but very properly adds, that if decided improvement have not resulted within forty-eight hours, or if the symptoms yield at first to the remedy, but soon return, there is no advantage in persevering with it.

Phytolacca.—Evening chilliness, followed by morning dry and sore throat, swelling of the soft palate and tonsils, livid exudations on the tonsils and fauces, sense of roughness or rawness, difficult deglutition even of liquids, extreme sensitiveness of the amygdalæ, fever and arterial excitement; whenever diphtheretic inflammations are likely to prevail, this remedy is recommended.

Merc.-Iod., or *Merc.-Biniod.*—has proved of great value in the disease, and should be administered as soon as any diphtheretic patches are observed, or *swelling of the glands*. Difficult swallowing, pain in, and swelling of, the salivary glands, and *putrid Sore throat*, indicate this remedy. The 1x or 2x trit. is the strength on which we place the greatest reliance; a grain every hour for four times, then every two or three hours.

Acid.-Muriat.—Malignant Diphtheria, with foul, greyish ulceration of the throat, *fœtid breath*, and extreme *general prostration*. This remedy should be used in a low dilution, in frequently-repeated doses; and locally as a paint to the throat, or as a gargle when the patient is able so to use it.

Kali Permang.—Malignant Diphtheria, with extensive swelling of the throat and cervical glands; pseudo-membranous deposit, partially or completely covering the fauces; obstructed swallowing; a thin, or *muco-purulent discharge* from the nose, excoriating the parts; thick, obstructed speech, and *very offensive breath*. It is believed that there is no remedy which will so rapidly and surely remove the offensive odour of the diphtheretic breath as the *Permanganate*. *K.-Chlor.* closely resembles it.

K.-Permang., *K.-Chlor.*, *Condy's Fluid*, or *dilute Carbolic Acid*, should be used as a gargle or wash to the affected parts; or administered by *inhalation*, or the *spray-producer*.

Baptisia is recommended as having a specific relation to the *blood-poison*.

Arsenicum, in the first and last stages of this disease, is of immense value, particularly when there is *marked and increasing prostration;* when there are—*œdema*, putrid odour of the throat and air-passages, and tenacious fœtid discharge from the lining membrane of the nostrils.

Ammon.-Carb. is also a valuable remedy in malignant cases, and may be administered alternately with *Ars.*

Dr. W. Morgan recommends also, "*Lachesis.*—The sensation of strangulation and suffocation, as if a cord were tied tightly round the throat. *Spongia.*—When the disease invades the wind-pipe; and *Hydrochloric Acid* as a topical application."

Arndt's System of Medicine, Vol. III., gives an interesting case of cure of "Laryngeal Diphtheria" (which is so generally fatal) with Kali bichron. A child, two and a half years old, somewhat scrofulous, but presenting a generally healthy appearance, was taken with a severe type of diphtheria, not, however, very malignant. The exudation filled the pharynx, covering both tonsils and the velum pendulum, and extended into the posterior nares. About the fifth day a croupy cough set in, and severe spasms glottidis. The child was exceedingly irritable and bad-tempered. It became impossible for any nourishment or medicines in liquid form to be given, and any attempt to force them brought on a spasm which threatened complete suffocation. I was obliged to administer the 30th of Kali bichron. whenever it could be given, which was at intervals of from three to six hours; a little milk was taken at smaller intervals. The child made a prompt and perfect recovery, there being but slight paralysis of the palate muscles, which quickly yielded to Gelseminum. Another case of laryngeal diphtheria was cured by taking this remedy, although others were used in alternation with it at different times. In the first case no local application could be used.

Local Treatment.—In the commencement, a large, thick, hot poultice should be applied around the throat; but in advanced severe cases external applications are inadmissible, as they rather tend to increase the œdema and extend the disease. Dr. Morgan says: "I generally use the ordinary compress, or spongio-piline, saturated with a hot or cold solution of *Camphor* or *Terebene.*" The inside of the throat may be steamed with the vapour of water and Acetic acid (a wine-glassful of strong vinegar to a pint of hot water).

A very abundant and fœtid false membrane is liable to reinfect the system secondarily, and hence such solvents and deodorisers as *Ac.-Mur.*, *K.-Permang.*, *Glycerine*, *Ac.-Acetic*, and especially *dilute Carbolic Acid*, are of the greatest value.

Tracheotomy is sometimes performed, but it can hardly be expected to save life, inasmuch as the disease and false membrane often extend down the trachea to the bronchi, beyond the reach of this operation.

Fumigation by burning Sulphur.—A Royal Commission on Diphtheria in Victoria strongly recommended this means of arresting the disease. The diffusion of *Sulphurous Acid Gas*, it is believed, will bring Diphtheria into the catalogue of the zymotic diseases, and under more complete control. The fumes of crude Sulphur are the most powerful disinfectant we possess, and in diseases of the throat and air-passages threatening Diphtheria it is a remedy within the reach of all, till medical aid can be procured. The use of the spray is uncertain, but it is easy to fill the room, all apertures being closed up, with fumes from a small quantity of sulphur sprinkled on a piece of wood, or on a few live coals. Of course the quantity used must not have a stifling effect.

Warm Vapour.—The temperature of the room should be maintained at 68° Fahr., and the atmosphere made moist by the steam from a kettle with a long spout constantly boiling on the fire. Such an atmosphere is easily secured by forming a tent with blankets over the bed, and then bringing a pipe to convey the steam under it.

Warm Baths.—These are valuable accessories. The skin is hot and dry, the urine is often suppressed, the bowels confined, and thus the poison is retained in the system. Warm baths, and the free use of cold water as a beverage, often restore the functions of the skin, the bowels, and the bladder.

Ice.—If vomiting occur, constantly sucking small pieces of ice tends to allay it; it also affords comfort to the patient, by limiting the abundant secretion of mucus which is so annoying from the constant hawking and deglutition it occasions (*Ringer*); and, as a diluent, it favours the action of the kidneys.

Diet, etc.—From the very commencement of the disease, the strength of the patient must be well sustained by nourishment, and he must be urged to swallow it in spite of the pain which it occasions. Eggs beaten up in milk, or in brandy and water with sugar; beef-tea slightly thickened

with rice or pearl-barley; arrowroot or sago, with port or sherry. Sudden, extreme prostration requires wine or brandy. A teaspoonful of pure glycerine every three or four hours, and as much wine as the patient can take short of intoxication, will do much to sustain strength.

Children who persistently refuse to swallow, must have nutritive injections in bad cases. Injections (about one ounce at a time) should be commenced, if necessary, immediately the true character of the disease is recognised, and repeated every two to four hours.

Convalescence.—Much caution and patience are required during convalescence, as relapses are prone to occur. Nourishing diet, rest, and change of air, are of great utility. Nothing does so much good as *a thorough change of air*.

Accessory Means.—All superfluous furniture should be removed from the patient's room, which should be large and well-ventilated, with a temperature of about 66° Fahr. The linen should be frequently changed, and it, as well as all discharges, immediately disinfected.

Preventive Measures.—The cesspools should be emptied, and if too small or defective, new ones built. The house, water-closets, and local drainage should be thoroughly examined, and imperfections scrupulously rectified: also, if necessary, chloride of zinc or of lime constantly kept therein and thrown down the drains. All dust-holes and accumulations of refuse should be cleared away; while a plentiful supply of water should be kept in the house, and every room regularly well cleaned, whitewashed, and thoroughly ventilated.

56. Whooping-Cough (*Pertussis*).

Definition.—A paroxysmal cough, consisting of a series of short, spasmodic, forcible expirations, followed by a deep, prolonged inspiration, attended with a peculiar sonorous sound called the "hoop," "whoop," or "kink," the paroxysms terminating in expectoration or vomiting of thick, glairy mucus.

It is infectious, often epidemic, and generally affects infancy

and childhood. Infants under three years of age are especially liable to it; it is rare after ten. Adults are not quite exempt. The younger the infant the more dangerous the disease. In delicate or scrofulous constitutions it is a distressing malady. It frequently occurs as an epidemic about the same time as Measles; and though this may be at any time of the year, these disorders are specially prevalent in spring and autumn. The duration of the disorder varies from two or three weeks to many months, depending very much on the temperament and constitution of the child, but is often much abridged by homœopathic treatment. One attack generally ensures immunity for the rest of life.

Pathology.—A specific blood-poison, which directly affects the pulmonary mucous membrane and the nervous system, producing catarrh, fever, and a peculiar inflammation of the mucous membrane of the bronchi, causing the exudation of a viscid mucus; as a consequence of this inflammation the absorbent glands at the root of the lungs enlarge and thus irritate the branches of the *Pneumogastric nerve,* which are situated there.

Cause.—An unknown *materies morbi* acting in the body, transmitted by the air and by *fomites.** As an infectious disease it is most dangerous to the unaffected when at the height of its development. But a frequent source of infection is when a child has recovered from the disease, and is thought to be safe from further attack, but takes it again in a mild form, and then transmits it to those in whom it may be developed in the worst form. It is therefore by no means safe to admit into schools and families any child who comes from a house where the cough still lingers. Grauvogl regards Whooping-cough as symptomatic of kidney-disease, and prescribes *Nux V.* (See his Text Book, vol. ii. p. 190.)

Diagnosis.—The earliest means of recognition is *persistent coughing.* When the "whoop" is heard all doubt is removed. It should be distinguished from "Laryngismus Stridulus" or

* "Whooping-cough was some years ago introduced into St. Helena, where it proved very fatal: the captain of a ship, having some children labouring under the disease on board, allowed their dirty linen to be sent on shore to be washed, and so introduced the disease among the inhabitants" (*Aitken*).

"Spasmodic Croup." In Whooping-cough the "whoop" *follows* the cough; in Spasmodic Croup, it precedes it, when present; but cough is not an essential symptom of Laryngismus Stridulus.

Symptoms.—Whooping-cough is generally preceded by a common cold,—cough, feverishness, etc. After from seven to ten days of the catarrhal stage, the cough becomes louder, more prolonged, and assumes the characteristic convulsive character. A sensation of tickling in the larynx indicates the advent of cough, and warns the child to lay hold of something for support during the paroxysm. Each paroxysm consists of a number of sudden, violent, and short *ex*piratory efforts or coughs, which expel so large an amount of air from the lungs that the patient appears on the point of suffocation: these forcible efforts are followed by a deep-drawn *in*spiration, in which a rush of air through the partially closed glottis gives rise to the distinctive crowing or whooping noise. This *whooping* is the signal of the patient's safety, for when suffocation does take place, it is before the *crowing inspiration* has been made. During the paroxysms, the face becomes deeply red or black, and swells; the eyes protrude, and are suffused with tears; and the expression and appearance of the sufferer are such as apparently indicate imminent suffocation. The paroxysm terminates by vomiting or the expectoration of a considerable quantity of glairy, ropy mucus, almost immediately after which the child returns to his amusements, and appears quite well. The ropy kind of expectoration which follows the cough enables us to distinguish it from common cough even before the "whoop" has been heard. The attacks recur three or four times a day, or every three or four hours, or oftener; sometimes blood escapes from the nose, mouth, and even from the ears, during the fits. The cough is generally worse at night, so that a decline of nocturnal attacks is a favourable sign. But a severe relapse may ensue from exposure to cold, improper food, and want of careful nursing during convalescence. Weakness and loss of flesh are occasioned by the repeated ejection of food from the stomach, and by the terror with which the child dreads the attacks. It is rarely fatal after the fifth year, though danger is greater

during the colder seasons of the year in young infants, and in strumous children.

Complications.—Whooping-cough often follows Measles and Small-pox, and may be complicated with them, and with Bronchitis, Pneumonia, Tuberculosis, Pericarditis, etc. It is therefore desirable that the chest should be examined occasionally during the disease by *percussion* and *auscultation*, especially in obstinate cases, so that any complications may be early met. Convulsions are liable to occur if teething be in progress at the time. If there exist a predisposition to Consumption, Whooping-cough may hasten its development.

Epitome of Treatment.—

1. *Premonitory febrile symptoms.*—Acon., Bell., K.-Hydriod., Ac.-Carbol. (See Sections on "Cold in the Head," and "Cough.")

2. *Developed Whooping-Cough.*—Dros., Coral.-Rub., Ammon.-Brom.; Nitrite of Amyl.—by inhalation—(*to arrest paroxysms*).

3. *With gastric symptoms.*—Ipec., Puls., Ant.-Tart. (*suffocative accumulation*), Kali Bich.

4. *With convulsions.*—Cup., Bell., Opi., Ac.-Hydroc.

5. *With lung complications.*—Acon., Phos., Bry., Ant.-Tart.

Special Indications.—*Aconitum.*—Dry, hard, or wheezing cough, with burning pains or tickling in the windpipe, most severe at night, dry heat of the skin, scanty, high-coloured urine, *general febrile symptoms.*

Belladonna.—Sudden, violent cough, *worse at night*, with *sore throat, determination to the head*, effusion of blood in and around the eyes, Epistaxis, etc. In the usual course of Whooping-cough, *Bell.* may follow *Acon.*

Drosera.—Whooping stage, with frequent and excessively *severe paroxysms of hoarse, loud cough*, sometimes with Hæmorrhage from the mouth and nose; there may be no fever, or it may be intense, with perspiration, vomiting of food, water, or slimy mucus. *Drosera* is generally efficient in epidemic Whooping-cough, except in scrofulous children, who require more deeply-acting remedies. A dose after every fit of coughing, till improvement takes place. In our experience, low dilutions act best.

Ipecacuanha.—*Vomiting* of mucus or food and other *gastric symptoms;* sneezing; watery or bloody discharges from the eyes and nose; violent cough, which threatens suffocation. Especially valuable after *Acon.* and *Bell.*

Veratrum.—The mucous rattle begins low down in the chest, with tickling irritation, constriction of the larynx, fever, thirst, extreme *weakness, cold perspirations,* bluish face, protruding eyes, *anxious expression,* distress about the heart, involuntary escape of urine or fæces during the height of the cough, and vomiting of large quantities of mucus at the end of the paroxysm.

Kali Bich.—Much *tough gluey phlegm,* which adheres to the throat, and causes frequent vomiting, for which symptoms we have found it of great value; night sweats.

Cuprum.—Violent forms of Whooping-cough, causing *Convulsions;* the body becomes rigid, the cough suffocating, and the breath nearly suspended during the paroxysms, which occur frequently, and are followed by Vomiting, great prostration, and slow restoration. Trit. 1 is recommended. *Ant.-Tart.* may be alternated with *Cupr.* if there be rattling of mucus in the chest between the paroxysms.

Opium.—*Stupor;* irregular breathing; *Constipation;* also when a remedy, well indicated, does not produce the desired results. In the latter case, a few doses will suffice.

Ammonia Brom.—Drs. Harley and Gibbs report many cases cured with this remedy, which is said to be almost *specific.*

Phosphorus.—Whooping-cough complicated with *diseases of the chest,* fever, pain, etc.

Cina.—Whooping-cough with *worm-symptoms*—paleness, picking of the nose, *itching of the anus,* irregular appetite, etc. *Cina* is often useful in alternation with *Bell.,* when there are symptoms of *Water-on-the-brain.*

Sulphur.—Whooping-cough *on the decline;* this may be recognised by the phlegm losing its tenacious character and becoming opaque. See also *Puls.* and *Carb.-V.*

Cocculus.—Vomiting of thick viscid mucus; frequent passage of much pale urine with tenesmus.

Arnica.—Rupture of blood-vessels in the eye.

Diet.—Light, digestible, nutritious food in moderate quan-

tities; stimulants should be avoided. Indigestible, or too large a quantity of food is almost certain to excite a paroxysm. Toast-and-water, barley-water, gum-water, linseed-tea, etc., varied to meet the patient's taste, are grateful and soothing. (See Sec. 28, on Demulcent Beverages, p. 115.)

Accessory Treatment.—It is necessary to treat children with great consideration, and to overlook many of their derelictions; as violent emotions, or fits of anger, add to the severity and frequency of the paroxysms. Infants must be constantly watched, taken up as soon as a fit comes on, and placed in a favourable posture. *Frictions* with olive-oil, or simple liniment, over the chest and along the spine, for ten or fifteen minutes, morning and night, in a comfortably warm room without currents of air, are often of great efficacy. During fine, warm weather, the patient should be much in the open air; but damp, cold, and exposure to draughts should be strictly avoided. Warm clothing is necessary. In obstinate cases, and in convalescence, *change of air*, if only for a short distance, proves very beneficial. If possible, mountain- or sea-air, or pure country-air should be chosen, as it acts favourably by removing irritation of the nervous system, and completing restoration.

57.—Mumps (*Parotides*).

Definition.—Inflammatory swelling of the salivary (*parotid*) glands beneath and in front of the ear, frequently attended with pain, soreness, and difficulty in moving the jaws. The glands sometimes attain a very large size; the enlargement generally takes place first in one gland, and then as that gradually resumes its natural size the other begins to swell.

Causes.—A specific morbid miasm, generated during peculiar conditions of the atmosphere. It is liable to occur during the course of severe fevers, in Cholera, and from large doses of *Iodine* and *Mercury*. It often appears as an epidemic, particularly in cold and damp weather; is more incident to children after the fifth year than to adults; and only occasionally attacks the same person twice. It is very infectious; children frequently take it from their mates and playfellows.

Symptoms.—At first there is a feeling of stiffness and soreness on moving the jaw, with some discomfort in eating. The glands in one or both parotid regions soon begin to swell, and often cause considerable deformity, with agonising pain on eating, or even drinking, but seldom suppurate. These symptoms are usually ushered in and attended by more or less fever and headache. In favourable cases the inflammation and swelling reach their height in about four days, and at the expiration of a week or ten days all traces of the complaint disappear.

Metastasis.—In many instances, as the swelling of the neck and throat subsides, exposure to cold, or cold local applications, will cause the *testicles* in the male, and the *mammæ* in the female, to become tender and swollen. Occasionally the metastasis is to the brain, and then it becomes a very serious disease. A fatal case occurred within the Author's observation at the time of writing, when his aid was sought too late—profound coma had shut out all hope of recovery.

Epitome of Treatment.—

1. *Swollen glands; difficult mastication.*—Merc.-Cor., or, *in strumous patients*, Merc.-Iod.; a dose every six hours. Mercurius is the chief remedy, and generally sufficient to effect a cure. Phytolacca is also very valuable.

2. *Feverish disturbance.*—Acon., two or three doses.

3. *Erysipelatous character*, with pain, and a tendency to metastasis to the *brain.*—Bell. Gels. or Hyos. may follow, if Bell. does not give a speedy relief.

4. *Metastasis to the testicles or mammæ.*—Puls. An ointment of *Belladonna extract* may be used locally (one grain to an ounce of simple cerate).

Accessory Measures.—The patient should be kept in a warm room, but not confined to bed. The parts should be fomented with hot water several times a day, and in the intervals covered with a silk handkerchief or a flannel bandage. In mild cases, a flannel roller is the only local application necessary. In this disease, as in Quinsy, semi-liquid food should be chiefly used, since it causes the least pain in swallowing. All excitement should be avoided, as complete *rest*, both physical and mental, favours recovery.

58.—Influenza (*Catarrhus Epidemicus*).

Definition.—An epidemic contagious catarrhal disease, with special and early implication of the lining of the nose and upper part of the throat, lasting from four to eight days. One attack is not preservative against a subsequent one in another epidemic.

It was first called *Influenza* in the seventeenth century, in Italy, because it was attributed to the "Influence" of the stars, and this term has now passed into our nomenclature. It is supposed to travel from east to west, spreads rapidly and extensively. It is most severe in low and insalubrious localities, and at the early part of the visitation. In aged persons, and in others whose lungs have been previously diseased, it is tedious, and sometimes fatal. "In the epidemic of some years since it was calculated that in London at least 250,000 persons suffered; in Paris, between one-fourth and one-half of the population; and in Geneva, not less than one-third."

Early in 1890 "Influenza" again made its appearance, but in a much more severe form. Nearly all the countries of Europe were visited, and the mortality was exceedingly high, more especially amongst the well-to-do classes. For a fuller description of this "epidemic" we must refer our readers to the volume of the *Homeopathic World* (1890), where from month to month its various symptoms, treatment, and remedies are given.

The Registrar-General in his annual report for 1890 says of this disease: "The year 1890 was marked by a visitation of this country by epidemic Influenza. Every year there are few deaths ascribed to Influenza; but the vagueness with which the term is often employed, and the absence of any very constant pathological feature even in the undoubted cases of this disease, give fair grounds for doubting whether the Influenza deaths of ordinary years are of the same nature and due to the same cause as are the deaths in the epidemic periods, and whether they should not have been classed either under Pneumonia or Bronchitis, rather than under the more specific designation. If, however, there be in ordinary years a transference of deaths from diseases of the respiratory

organs to Influenza, there is most assuredly in epidemic years a very much greater transference in the contrary direction, a large proportion of the deaths due to the epidemic Influenza being registered, not under Influenza, but under such headings as Bronchitis, Pneumonia, and the like. For an indisputable epidemic of Influenza is almost invariably accompanied, not only by a notable increase of mortality under that heading itself, but also by notable increases under these other headings.

Under these circumstances, it is plain that too much reliance must not be placed upon the official returns of Influenza mortality. In the years of epidemics such mortality will be much understated, while the contrary will probably be the case in non-epidemic periods. A careful examination of the figures leaves, however, no reasonable doubt that epidemic Influenza was really prevalent in this country in 1841, 1847–8–9, 1851, 1853, and 1858, while the mortality figures for the series of years since this last date give no certain evidence of the existence of an epidemic of this disease, until we reach 1890—that is, for more than thirty years.

The outbreak of 1890 began in reality near the close of the preceding year, the disease having apparently made its way into our ports from the Continent, and diffused itself rapidly over the country. It was, however, not until January that the epidemic was thoroughly established. In London it began to subside before the close of that month, and though both its maximum and its subsidence were somewhat later in most other parts of the country, it may be said—disregarding some few exceptional districts—to have come to an end before the close of the quarter.

The total number of deaths directly ascribed to Influenza in the year was only 4,523, or 157 per million living; but there can be no doubt that the deaths really caused by this disease were far more numerous, for concomitantly with the epidemic there was an enormous rise in the mortality under other headings, and especially under Pneumonia and Bronchitis; rises which could not be explained by the usual cause of increase under these headings, viz., cold weather, inasmuch

as the temperature in the month of January, when the epidemic in London was at its worst, was 6°·8 Fahr., and that of the whole quarter 2°·5 Fahr., above the average. The disease is not limited to man, but has been noticed in horses,* dogs, etc.

Diagnosis.—The symptoms differ from those of common cold chiefly in their severity, sudden appearance and rapid extension among a population; their disconnection with either a low or a sudden variation of temperature; the great febrile disturbance which prevails; the general prostration and nervous depression which accompany and follow the disease; and in their protracted duration. In many cases, there is a herpetic eruption around the mouth.

Symptoms.—Chilliness or coldness down the spine, anxiety, feverishness, frontal headache, pains in the limbs and back, severe paroxysms of cough, nausea, loss of appetite, vitiated taste, aching pain and suffusion of the eyes, sneezing, thin acrid discharge from the nostrils, and extreme muscular prostration. In short, all the symptoms which characterise *Gravedo*, *Coryza*, and *Bronchitis* respectively, are often present in *Influenza*.

Epitome of Treatment.—

1. *Uncomplicated Influenza.*—Camph., Acon. (*chills*), Ars.
2. *With troublesome cough.*—Kali Bich.
3. *Tedious or imperfect recovery.*—Sulph., Phos.
4. *Distressing bone pains.*—Eupat. Perf.

Diet and Regimen.—Farinaceous food, and if there be great prostration, beef-tea, with *repose in bed*, or on a couch. In many cases, confinement in bed for a day or two is quite necessary for the safety of the patient, and *always hastens recovery*. The room should be warm, well ventilated, and the patient placed so as to avoid draughts. If there be much fever present, with loss of appetite, toast-and-water or barley-water will be suitable. For severe Cough, the air of the room should be kept moist by conducting into it the steam from a boiling-kettle by means of a tube, or by putting boiling-water into flat shallow vessels; also *inhalation* of hot vapour is useful (see "Inhalations," Sec. 37). However intense the fever,

* See account of the American "*Epizootic*," in *H. World*, vol. viii. p. 41.

champagne may be allowed. When the fever abates, a more generous diet should be allowed. If prostration be the predominant symptom, *Liebig's Extract of Beef*, raw eggs and milk, should be resorted to. After a severe attack, change of air, with walking- or horse-exercise, is very desirable. During an epidemic of Influenza, night-air is injurious.

Complications.—Should these arise, they must be treated according to their nature, as directed in other portions of this Manual. The most common are Cynanche, Pneumonia, Bronchitis, Diarrhœa, Dysentery, Erysipelas, and a low form of Arthritis.

59.—Erysipelas (*Erysipelas*)—St. Anthony's Fire.

Definition.—An inflammatory affection of the skin (*simple Erysipelas*), sometimes extending into the tissues beneath, with diffuse inflammation of cellular tissue (*phlegmonous Erysipelas*) ; and tending to spread indefinitely.

Idiopathic Erysipelas arises from constitutional causes, and generally affects the head and neck; *traumatic*, follows a wound or injury, and may occur on any wounded part.

Symptoms.—*Simple Erysipelas* is known by a spreading inflammatory redness of the skin, with considerable puffy swelling, tenderness, burning, painful tingling, and tension. The colour varies from a faint- to a dark-red or purplish colour, becoming white under pressure, but resuming its former colour on the removal of the finger. An attack is usually ushered in with shivering, languor, Headache, nausea, bilious Vomiting, and the ordinary symptoms of Inflammatory fever, accompanied or followed by inflammation of the part affected. When Erysipelas attacks the face, it nearly always commences at the side of the nose near the angle of the eye.

Phlegmonous Erysipelas is marked by a deeper redness, or it may be redness of a dusky or purple hue, which is scarcely, if at all, removed by pressure ; the pain is burning and throbbing ; the swelling is greater, and the surface irregular ; and there is often deep-pitting upon pressure. Sometimes the swelling and disfigurement are so great that the features are

quite obliterated, and the parts lose all resemblance to anything human. Delirium often occurs irrespective of any involvement of the membranes of the brain.

Terminations.—The inflammation may terminate by *resolution*, the redness fading away and the skin peeling off; by *vesication*, bladders forming discharging yellowish serum, and leaving crusts which at length fall off; or by *Gangrene*, when the skin becomes black, and the bullæ are filled with bloody serum.

Dangers.—Erysipelas may prove fatal in the following ways:—(1) By *exhaustion:* the constitutional symptoms resemble those of Enteric fever, and the degree of blood-poisoning is great, although the local disease may be limited in extent. (2) By *obstruction of the air-passages:* the inflammation may lead to infiltration of the sub-mucous tissues about the wind-pipe, the opening into which may be closed, and the patient die suddenly of *apnœa*. The symptoms indicating this condition are—impaired respiration, slight lividity of the lips or finger nails, altered tone of voice, or Cough, etc. (3) By *coma*, from effusion within the cranium: this may arise from extension of the inflammation to the membranes of the brain.

Causes.—Exposure to cold; impaired digestion; wounds, particularly from dissecting and surgical instruments; badly-ventilated and overcrowded apartments; certain conditions of the atmosphere; and a morbid state of the blood from disease, the habitual use of stimulants, etc., and consequent debility. The tendency of this disease to attack different parts simultaneously, or by *metastasis*, furnishes evidence of its origin in a vitiated condition of the blood. The chief *exciting* cause of Erysipelas is a recent wound, and the *predisposing* cause is inattention to hygiene, combined perhaps with a personal or family proclivity to the disease. An incautious use of *Arnica* will sometimes occasion an attack.*

Prognosis.—The simple or cutaneous variety is attended with much less danger than the phlegmonous: the idiopathic with less than the traumatic. The disease is also more serious when it occurs in an epidemic or endemic form.

* See *H. World*, vol. viii. p. 46.

Mere extent of inflammation is not of so much importance as a high degree of blood-poisoning, combined with a rapid, weak pulse, a dry, brown tongue, low muttering Delirium, and great prostration. When the disease attacks the head, unless it is controlled by treatment, the membranes of the brain are in danger of being implicated. The disease is most serious at either of the extremes of life. Lastly, the habits and health of the patient, prior to the attack, greatly influence the result. It is especially fatal to drunkards and in broken-down constitutions.

Epitome of Treatment.—

1. *Febrile stage.*—Acon., Ver.-Vir.

2. *Smooth* (*non-vesicular*) *variety.*—Bell., Bry., Puls.

3. *Vesicular.*—Rhus Tox., Canth., Ver.-Vir.

4. *Additional remedies.*—Apis (*puffy swelling*); Ars., Carbo Veg., Ac.-Nit. (*phlegmonous*); Lach., Ars. (*gangrene*); Sulph. (*chronic or declining*).

China (*in simple acute cases, will often cut short an attack if given early*); Rhus V. (*vesicles and bullæ*); Hep. S. (*when suppuration has occurred*); Crotalus (*gangrene*); Cup. Acet. (*of the head*); Graph. (*wandering erysipelas*); Aur. Met. (*painless*). —*J. H. Clarke.*

Special Indications.—*Aconitum.*—*General feverishness*, with local inflammation and tenderness. *Acon.* is mostly required before the rash appears, but may be given, if indicated, at any stage of the disease. The tincture of the root is often the best remedy for either *smooth* or *vesicular* Erysipelas.

Belladonna.—Cutaneous, bright-red inflammation, swelling, and *non-vesicular* eruption (if there be *excessive* swelling, *Apis* should be preferred). *Violent Headache*, thirst, Constipation, and brown-red, thick urine, indicate *Bell.*; also extension of the inflammation towards the *brain*, with *Delirium*, lethargy, or twitching. It may be alternated with *Acon.* early in the disease.

Bryonia, instead of *Bell.*, if the joints are specially affected.

Pulsatilla, if the disorder flies quickly from one part to another; Indigestion after the eruption declines.

Rhus Tox.—*Vesicular* Erysipelas, whether on the face or

elsewhere, with swelling and shining redness; much restlessness.

Veratrum Vir.—This remedy is also adapted to vesicular Erysipelas, when accompanied by *cerebral disturbance.*

Apis.—Erysipelas with *acute œdema*, without the intense cutaneous inflammation indicating *Bell.*, or the disposition to form vesicles like *Rhus* (*Hughes*).

Cantharis.—Erysipelas with vesicles, much irritation, burning and serous exudation. Erysipelas from the use of *Arnica.*

Arsenicum.—Erysipelatous inflammation taking on a gangrenous character, when fresh patches appear as others decline; also when there is excessive general *prostration.*

Local Measures.—The natural functions of the skin should be promoted, and currents of air, or exposure to great variations of temperature, guarded against. In mild forms of the disease, no external applications are required; wet compresses, ointments, etc., are not only useless, but favour the spread of the inflammation. But when there is great heat or irritability of the skin, much relief will be experienced by dusting it over with dry flour, finely-powdered starch, or violet-powder. Flour is also useful to absorb any fluid that exudes from the skin. When, however, inflammatory swellings are very tense and painful, warm fomentations may be first applied, and afterwards the parts sprinkled over with flour or fine starch, or painted with collodion, if the inflammation is of limited extent, or any other suitable substance, to keep out the air. If there is much œdema, moderate pressure should be maintained by the application of well-adjusted bandages. If matter forms, incisions are generally necessary to afford openings for its discharge; poultices are then to be applied, and afterwards bandages, to prevent the lodgment of matter. It has been recommended to circumscribe the affected part with a caustic pencil, or a fine camel's-hair brush dipped in *Iodine.* This, it is asserted, prevents the spread of the eruption. A lotion of *Ac.-Carbol.* and Milk (gtts. xxx. *ad* Oj) gives great relief. Lotions of *Sulphurous Ac.* with glycerine or water (in equal parts of either), *Veratrum Viride* as a paint or lotion, or with glycerine, *Lemon Juice*, and *Cantharis*, have also been

recommended; they may also be applied by fumigation or the spray-producer.

Diet.—Pure water, gum-water, or barley-water, with lemon-juice, to allay the thirst. Severe and tedious cases require essence-of-beef, or *Extract-of-Meat*, and other sustaining diet, and even wine or brandy. Subsequently, a change of air, regular habits, and nourishing diet, essential in the after-treatment of all acute diseases, are necessary after severe Erysipelas.

60.—Puerperal Fever (*Febris puerperarum*).

Definition.—A continued fever, occurring in childbirth, often attended with peritoneal inflammation, uterine phlebitis, or other *local lesions*. The disorder is infectious, and has often appeared as an epidemic. Under allopathic treatment it is very fatal, but under homœopathic treatment it is rarely so.

Causes.—Instrumental or difficult labours, fœtid lochia, or decomposed clots of blood absorbed through slight abrasions in the utero-vaginal canal; decomposing fragments of retained placenta; violent emotional disturbances; transmission from one patient to another by doctors and nurses; infection from other animal poisons, as Scarlet fever, Erysipelas, etc., from which it is transmitted, and which are conveyed by contagion and *fomites*.

Symptoms.—From the third to the fifth day after delivery, there are rigors, followed by an increase of temperature (rising to 105·6°); more rapid pulse (ranging from 120 to 160); hurried short respiration; distressing thirst; sometimes nausea and vomiting; *distention*, *pain*, and *great tenderness*, over the *abdomen*, causing the patient to lie on the back, with her knees drawn up to relieve the abdomen from muscular pressure and the weight of the bed-clothes; suppression or alteration of the lochial discharge, suppression of the milk (if it has been secreted), severe pains in the head, flushed face, glistening eyes, anxious countenance, and sometimes delirium. It is remarkable that in most cases the patient loses all interest in the infant, and even expresses

dislike to it and her husband. If the disease be not checked, typhoid or malignant symptoms rapidly supervene.

Epitome of Treatment.—

1. *Invasive stage.*—Acon., Gels.
2. *Cerebral disturbance.*—Bell., Stram., Opi., Ver.-Vir.
3. *Complications.*—Bry., Acon., Bell., Merc., Hyos., Stram., Ac.-Mur., Ars.

Accessory Means.—The patient must have perfect repose, and most attentive but quiet nursing; the apartment must be ventilated without exposing the patient to cold; nourishment should be given frequently in the form of warm rice- or barley-milk, or beef-tea. Disinfection of linen, discharges, and the apartment, should be attended to. An injection of dilute *Carbolic Acid*, or *K.-Chlor.* will antidote offensive lochia.

"Hot flannels sprinkled with a few drops of turpentine applied to the abdomen. Hot injections of Condy's fluid solution."

61.—Puerperal Ephemera (*Ephemera puerperarum*).

Definition.—A fever of short duration, consisting of one or more paroxysms, which occur a few days after childbirth, attended with diminution of the milk and lochia, but *no local lesion*.

It appears about a week after delivery, rarely sooner, sometimes later; prevails in low, humid, marshy districts, where the population is sparse, or near stagnant ditches and pools; hence is malarious in its character.

Symptoms.—Chills, rigors, increased temperature, and perspiration, attended by pain in the head, back, and limbs, are the first signs. The eyes and features are sunken, the fingers blue, the secretions of milk, urine, and lochia suspended. The pulse is feeble and somewhat hurried. Depression, Hysteria, and delirium may follow. When perspiration breaks out, the patient improves, the secretions are re-established, and the fever passes away.

Treatment.—The same as for *Intermittent fever.* (See Sec. 50.)

CHAPTER II.

General Diseases:—B. Constitutional Diseases.

62.—Acute Rheumatism (*Rheumatismus acutus*)—Rheumatic Fever.

Definition.—A specific disorder characterised by fever, non-suppurating inflammation of the fibrous tissues about the joints, shifting pains, profuse acid sweats, excess of uric and sulphuric acid in the urine, and large excess of fibrine in the blood.

It is one of the most common, painful, and formidable diseases known, causing great suffering and threatening severe complications, especially inflicting serious injury on the heart. It is not limited to age, condition of life, or locality; nor to any one texture or organ. The parts chiefly affected are the ligaments, fasciæ, aponeuroses, tendons, bursæ, the periosteum, the perichondrium, etc. The joints and surrounding structures are most frequently involved; then the heart, kidneys, and arteries.

Sub-acute Rheumatism is the same affection in a modified form, often following upon the acute disorder.

Synovial Rheumatism has this special characteristic, that a non-purulent fluid accumulates in the synovial sacs, of the knee-joints particularly, causing considerable irritation, continuing with great persistence, and sometimes involving serious structural changes.

Gonorrhœal Rheumatism is treated as a complication of Gonorrhœa. (See Section thereon.)

Muscular Rheumatism in its different varieties, and *Chronic Rheumatism*, are referred to in the next following Sections.

Pathology.—It does not appear to be of miasmatic origin, nor derived from external sources; but recent investigation shows that it is inbred, and due to an abnormal condition of the blood. There seems to be a faulty metamorphosis of some of the animal fluids, an excess of lactic acid due to its non-oxidation; but the specific *materies morbi* is not definitely known, nor are the exact conditions of its development fully determined.

CAUSES.—The *predisposing* cause is constitutional cachexia. Hereditary predisposition undoubtedly exists in many persons. By some idiosyncrasy the poison is generated, and in virtue of some mutual or elective affinity it fitfully goes to and recedes from the white fibrous tissue which enters into the formation of the affected limbs and organs.

The *exciting* causes are, exposure to cold and wet, especially *evaporation* from wet or damp clothes, causing chill. This is, no doubt, an explanation why the disease is most common among the poorer classes of society, who cannot protect themselves so effectually as their wealthier brethren. The cold probably excites an attack of acute Rheumatism by arresting the secretory functions of the skin, which, in health, remove morbid substances existing in the blood; now, however, the functions of the skin being deranged, unhealthy elements accumulate in the blood, and Rheumatism ensues. Mere cold, however, is not so much a cause of Rheumatism as extreme atmospheric vicissitudes. Hence it is found that it is not most prevalent in the coldest regions of the globe, but rather in those climates, and during those seasons, which are damp and changeable.

Among exciting causes may also be enumerated, excessive exertion performed when the limbs are in an uncomfortable position, as lifting, mis-stepping, and twisting the arm; disordered digestion, mental worry, or great bodily fatigue, abstracting nerve-force from the stomach and lessening its functional power; the suppression of an eruption or rash, as of Measles; or the sudden stoppage of Dysentery. Rheumatism depends essentially upon vicissitudes of temperature and other allied conditions; exposure to cold; and after a first attack it frequently returns when the patient is in a bad condition of health. Very few children suffer from Rheumatism, though the predisposition may be established in youth; after that period it becomes common and is chronic in many aged persons, from which it is to be inferred, what observation and experience show to be true, that whatever exercises a prolonged depressing influence on the constitution, especially if there be hereditary predisposition, may cause the development of the rheumatic dyscrasia.

Symptoms.—Acute Rheumatism is usually ushered in with *malaise*, febrile disturbances, followed by the local attack of inflammation of the fibrous structures about one or more of the larger joints (*articular Rheumatism*)—the shoulder, elbow, knee, ankle, the fibro-serous covering of the valves of the heart, the pericardial sac, etc. Exposed joints are more subject to attacks than those that are covered, the larger more frequently than the smaller, and the small joints of the hands more frequently than those of the feet. Sprained or otherwise injured joints are particularly liable to suffer. The general febrile condition often precedes the local inflammation one or two days; sometimes the general and local symptoms occur simultaneously, while in others the inflammation of the joints precedes the febrile condition. The affected joints are swollen, tense, surrounded by a rose-coloured blush, and acutely painful; pain is a more constant symptom than swelling, and swelling than redness. The pain has many degrees of intensity, is generally intermittent, abates somewhat in the day, but is aggravated at night, and in all cases is increased by pressure, so that even the touch of the medical attendant or nurse, or the weight of the bed-clothes, can scarcely be borne. The patient often remains fixed in one posture, from which he cannot or dare not move. The skin is hot, but covered with a sour offensive sweat, and so highly acid as to redden litmus paper. The perspirations, although unattended by immediate relief, are Nature's mode of eliminating the disease; for the pains are always aggravated, and the constitutional symptoms intensified, if they become suppressed. It is only when the perspirations lose their peculiar *sour* character that they become useless. The *urine* in acute Rheumatism is scanty, often resembling porter in colour, of high specific gravity, and deposits, on cooling, deep-coloured sediments of urates. The pulse is round and full, varying from 90 to 120; the tongue loaded with a yellowish-white mucus; the head but slightly affected. The usual absence of Headache or Delirium distinguishes acute Rheumatism from the continued fevers. Intense thirst is a common feature, the appetite is fastidious, and the digestive functions are seriously impaired.

The temperature gradually rises to an evening maximum of 104° from the fifth to the ninth day, and may remain high for a few days, and will then gradually decline. A register of 105° shows considerable danger. The thermometer gives no indication of the inflammation of the heart or other internal organs.

Metastasis.—Rheumatism is characterised by this remarkable peculiarity, that it is usually *erratic;* it often suddenly quits one joint to appear in another, and then in another; afterwards travelling back, perhaps to its original seat, the development of inflammation in one joint being often accompanied by its rapid subsidence in another, this alternation occurring many times during an attack. It also at times forsakes the joints and attacks various muscles. (See following Section.) When there is any catarrhal epidemic it may fly to the lungs, the pleura, or the bronchi; it may affect the sclerotic coat of the eye, and has occasioned inflammation of the brain. But the most serious metastasis is from the joint-structures to the pericardium or the valves of the heart. This complication may be expected in very severe attacks, in young persons, in women oftener than in men, in patients who have been previously weakened, and in persons troubled with irritability or palpitation of the heart.

Heart-Complications.—When Cardiac inflammation arises, the patient's countenance becomes dreadfully anxious, the breathing distressed, and pain is complained of in the heart's region; also there is tenderness between and under the ribs, and there may be Palpitation or irregular action of the heart. The physical *signs* of *Pericarditis* may be detected by the stethoscope, and a distinct friction or *to-and-fro* sound like the rubbing of paper, owing to the roughening of the serous surfaces by effusion of fibrine. This sound may soon be lost, either from the opposite surfaces becoming glued together, or separated by serous effusion. If the amount of effusion be large, both the circulation and the respiration become seriously embarrassed, the heart beats tumultuously, the sounds become muffled, and there is increased extent of dulness in the heart's region. *Endocarditis* may arise, with Pericarditis, or separately. The *symptoms* are similar to those of Pericarditis, but

the physical *sign* is a *bruit.* In Endocarditis, it is the left side of the heart that is generally affected. In consequence of the extreme danger of these complications, all cases of severe Rheumatic fever should be daily watched, so that the signs and symptoms of heart complications, which often come on insidiously, may be early recognised and met. For if Rheumatism be fatal, it is usually due to the cardiac affection.

Rheumatism and Gout.—For a tabular statement of the differences between these diseases, see Sec. 65.

Epitome of Treatment.—

1. *To cut short an attack.*—Acon.; also the early use of the vapour, hot-air, or blanket bath (see Sec. 32).

2. *Acute Rheumatic Fever.*—Acon., Bry., Bell. Also the careful and continuous application of moisture and *warmth.*

3. *Complications.*—Cimic., Cact.-Grand., Spig., Dig., or Ars. (*for the heart*); Colch., Coloc., Ran.-Bulb., Rhod., Rhus, or K.-Hyd., Sticta (*for the joints*); Ac.-Nit. (*profuse perspiration of hippuric odour*); Phyto. (*glandular enlargement*); Nux V., Bry., Gels. (*Dyspepsia*); Ver.-Vir (*vomiting, purging, debility, high pulse and temperature*); Hyos. (*delirium*).

4. *Sub-acute attacks.*—Rhus, Cimic., K.-Hyd.

5. *Prophylactic means.*—Sulph., Acon., or Dulc. (*immediately after exposure to wet*, etc.). The morning bath; the use of warm clothing. Anointing with oil is also of great value to the susceptible, as it diminishes the rapidity with which heat can be thrown off.

6. *Rheumatic Gout.*—Colch., Puls., Coloc., Ruta. (See also Section 64 on "Chronic Rheumatism.")

Special Indications.—*Aconitum.*—Acute Rheumatism, especially at the commencement, *when the fever is high,* and there are violent shooting or tearing pains, worse at night, and aggravated by touch. Also swelling and redness of the affected parts, impaired appetite, highly-coloured urine, etc. *Acon.* may be administered either alone or in alternation with *Bry.*, at intervals of one to three hours; or the latter may be administered in the day-time, and the former at night. Administered very early, *Acon.* is often sufficient to cure Rheumatism without the aid of any other remedy. It should be given in a low dilution. *Ver.-Vir.* (also in low dilution) may be sometimes indicated rather than *Acon.*

Bryonia.—Lancinating or stitching pains, affecting the muscles rather than the bones, worse on *the least movement*, but relieved by rest; also febrile heat, gastric derangement, constipation, profuse perspiration or coldness and shivering, and irascibility. *Cardiac, lung*, or *pleuritic complications* are but extensions of the rheumatic disease, and are not, therefore, necessarily indications for any change from *Bry.* or *Acon.* But it is sometimes necessary to change the remedy to *Rhus*, if the tendons become implicated, or to *Cact.* or *Spig.*, if the heart is specially involved.

Belladonna.—Frequent doses at night for *sleeplessness.*

Sulphur.—After the acute symptoms have subsided, to complete the cure and prevent obstinate sequelæ; when the constitutional predisposition is strongly marked; and as an intercurrent remedy. It is especially useful when the pains are drawing and tearing, *worse when cold*, and *better when warm.*

Diet.—During the fever the diet should be mainly restricted to water, milk-and-water, barley-water, gruel, and arrow-root, at least at first: afterwards, beef-tea, mutton-broth, etc. In Rheumatic fever, it is most important to administer nutriment exclusively in a liquid or semi-liquid form. Malt liquors, port wine, and sugar, should be avoided. Lemon-juice may be taken freely.

Accessory Means.—The general comfort and ease of the patient should be studied, and his person carefully protected from exposure. Perspiration and free excretion should be encouraged. Even temperature of the room should be maintained.

Hydropathic Treatment in the early stages of the disease is highly beneficial. Warm baths, hot-air baths, or hot compresses, are useful and comforting. *Spongio-piline*, made into gloves or caps for the hands, feet, elbows, or knees, or shaped to cover any large surface, is an excellent substance for conveying moisture to the parts: the spongy surface should be wetted, and every few hours re-moistened. *Wet-packings*, repeated as often as the fever returns, and enveloping the joints which are chiefly implicated, or even the whole body, with several folds of wet linen, are most useful adjuncts. Except,

however, when the skin is *hot and dry*, and temperature *high*, cold applications are contra-indicated, as, from the migratory character of the disorder, great risk would be incurred of repelling the poison into the circulating fluid, to settle possibly upon the heart or other internal part. Dr. Wilson Fox has tried with success, at University College Hospital, the following treatment, which has been found especially useful when the pains were excessive and the temperature high. The patient first received a vapour-bath, and then was thoroughly douched with water at a temperature of 90°, gradually cooled down to 40° Fahr.

Blankets in Rheumatism.—An invaluable adjunct to the measures already suggested is that of enveloping the patient in blankets and flannel. Sleeping in blankets greatly reduces the risk of Inflammation of the heart, diminishes its intensity and danger when it does occur; and at the same time does not prolong convalescence.

63.—Muscular Rheumatism (*Rheumatismus musculorum*).

Rheumatism is not always *articular*, but frequently manifests itself in the fleshy parts of different *muscular* structures, their fasciæ and aponeuroses; indeed there are few such structures exempt. The scalp, the muscles of the eye, of the face, of the larynx, of the clavicle, of the abdomen, of the uterus, of the *tendo achillis*, of the soles of the feet, are all subject to special attack. But the most familiar local varieties of this affection are Stiff-neck, Pleurodynia, Lumbago, and Sciatica. Muscular Rheumatism is rarely accompanied by redness, swelling, or other external symptoms.

(1) Stiff-neck (*Cervix rigida*)—Crick-in-the-neck.

Definition.—A rheumatic affection of the muscles of the side of the neck, chiefly the sterno-cleido-mastoideus, which become rigid, hard, and swollen. The least attempt to turn the neck is attended with acute pain. Sometimes the Rheumatism extends to the articulations of the clavicle and intercostal muscles.

TREATMENT.—Acon. (*from exposure to draughts*); Dulc. (*from damp weather*); Bell. (*with tearing lancinating pains*). For other remedies see Section 62.

(2) PLEURODYNIA (*Pleurodynia*).

DEFINITION.—Rheumatic inflammation of the muscles between the ribs, lining of walls of the chest, or of the fibrous fascia enclosing them. It is unaccompanied by cough or expectoration, but attended by such severe pain as to lead to the supposition that there is Pleurisy or Pericarditis. It is sometimes called *False Pleurisy*, and in the great majority of cases the left side only is affected. The pain is increased by deep inspiration or by any movement which stretches the muscles.

TREATMENT.—Ran.-Bulb. (*pain at lower margin of shoulder-blade*); Cimic. (*under left breast in women*); Arn., Acon. For other remedies see previous Section.

(3) LUMBAGO (*Lumbago*).

DEFINITION.—Rheumatism of the sheaths of the fleshy mass of the lumbar muscles on one or both sides of the loins, extending often to the ligaments of the sacrum, the pain being aggravated by movement of the back, and by pressure.

TREATMENT.—*Rhus Tox.*—Lumbago from getting wet; increase of pains during repose, at night, on *first* moving the affected part, or on first getting up in the morning; rigidity; chronic Lumbago.

Arnica.—Lumbago implicating muscles that have formerly been injured, as by over-lifting, a sprain, or a blow.

Aconitum.—Recent Rheumatism of the lumbar muscles, unassociated with injury.

Cimicifuga.—An excellent remedy in most cases, particularly if the sciatic nerve is at all affected.

Phytolacca.—Excruciating pains suggesting renal inflammation.

Ant.-Tart.—Acute pain on movement, inducing nausea, cold perspirations, and occasional cramps.

"*Act.-R.* (muscular pains, with restlessness and sleepless-

ness); *Bry.* (sensitive to touch); *Dulc.* (pain, as after stooping a long while); *Berb.* (with urinary or rectal troubles); *Rhod.* (from dry cold, pains worse on approaching storms); *Colch.* (tearing and writhing pains, worse by motion); also *Kali B.*, *Ac. Picr. Sulph.*, *Merc. S.* Locally a flannel belt, or a pine wool belt, should be worn."—*J. H. Clarke.*

(4) Sciatica (*Ischias*).

Definition.—Rheumatic inflammation of the aponeurotic parts of the glutei muscles, accompanied by gradually-increasing and intense aching, soreness, or darting pain, extending from the nates to the knee, and sometimes to the ankle. The patient is often obliged to walk very carefully, or is unable to move. Examination will probably discover no redness nor swelling anywhere, not even swelling or thickening of the nerve at the locus of pain, which is usually where a nerve branch passes through a fascia, or out of a bony canal, or lies in a superficial position.

Treatment.—Acon. (*recent inflammatory excitement in the nerve-sheath*), Coloc., Ars., Rhus, and friction, Phyto. (*chronic*); Staph., Spig., Puls., Am. Mur. (*pain worse sitting, relieved somewhat by walking, entirely by lying down*); Tereb. (*drawing, tearing, paralytic pains*); Caps. (*shooting, tearing from hip and knee*); Kali C. (*similar pain, aggravated about* 3 a.m.); Apocy. C. (*pain in region of hips*); Ruta (*pain as if beaten, limbs give way*); Nat. Sulph. (*pain only when stooping, or rising from a seat*). For other remedies see previous Section. Friction must be judiciously used, otherwise inflammation of the neurilemma may be set up.

Accessory Means.—*Liniments*, medicated with the same remedy as administered internally, or even simple *Olive Oil*, rubbed into the affected parts, are very useful. The frictions should be performed in a warm room, and currents of air guarded against. A *wet-compress*, simple or medicated, greatly assists the cure. In this and other varieties of muscular Rheumatism, rest and warmth are of great importance. The application of the common flat iron of the laundry, as hot as can be borne, with flannel between the skin and iron, is very

valuable. In Lumbago, nothing is so instantaneously beneficial as strapping the back from the level of the "seat" upwards, in layers that overlap each other, with strips of adhesive-plaster, or warm plaster. A pad of flannel or of unbleached cotton-wool wrapped across the loins, next the skin, is very comforting. Where persons are very liable to Lumbago from slight exposure to cold or damp, wearing a skein of silk round the waist is an excellent preventive. Generous, nutritive diet is desirable. Lemon-juice is a grateful and remedial beverage.

Rheumatism and Muscular Weakness.—Muscular Rheumatism is apt to be confounded with the painful muscular affections following prolonged or excessive exertion, or with the soreness or stiffness which occur during convalescence from any long illness, or accompany general debility. These affections are generally better after the repose of the night, but increase with fatigue; and the pain in the affected part is mitigated by relaxing or supporting it. The diagnosis is important, especially to medical men, because if we fail to prescribe appropriate medicines, nourishing diet, and proper rest and support to the weak muscles until they regain their tone, we shall fail to benefit the patient, who possibly in his contempt for medicine, as Dr. Tanner remarks, will hasten to try the good diet and pure air of some hydropathic establishment, and then circulate reports of his extraordinary cure, "after having been given over by the faculty."

64.—Chronic Rheumatism (*Rheumatismus longus*).

This is sometimes a sequel of the acute form of Rheumatism; at other times it is a separate constitutional affection, coming on quite independently of any previous attack. It is generally very obstinate, prone to recur, and is often worse at night. In time, the affected limbs lose their power of motion, and lameness results, the knee-joint being often affected; sometimes there is emaciation of the muscles; sometimes permanent contraction of a limb, or bony stiffness of the joint. It is a common disorder with the aged. There is but little febrile

disorder, no perspiration, and less swelling than in acute Rheumatism.

Treatment.—In the treatment of Chronic Rheumatism, dyspeptic symptoms, often associated with it, are primary considerations; and little hope of a cure can be expected till they are remedied. Suitable medicines will be found in the following list, and in the Sections on "Acute Rheumatism," and "Dyspepsia."

Rhus Tox.—When the sheaths of tendons, muscles, etc., are chiefly affected; tightening, lameness, stiffness, or tearing, drawing, bruise and sprain-like pain in the shoulders, wrist, back, or hips; sensation of creeping or of numbness; aggravated in the evening by exertion, or at night by the warmth of the bed; or when beginning to move after rest, or by immersion in cold water, or by change of weather, wind, cold, or by stretching the affected limb, or by turning in bed; lessened by gentle and continued motion, or by flexion, or by dry heat. In rheumatic lameness of the back and extremities, *Rhus* is often curative.

Bryonia.—Chiefly when the lower limbs are affected: severe pains down the calf of the leg; shining red swellings, with heat and dryness of the parts; pains aggravated by motion; indigestion, constipation, etc.

Aconitum.—Is often of service, and sometimes curative. It is more especially adapted to Rheumatism of the shoulder, and of the large joints generally, when there is no rigidity. Rheumatism of the heart, with Congestion and sense of anguish; and during febrile disturbance.

*K.-Hydriod.**—Excruciating pains produced by the least variation or irregularity of motion; inverted hands; swollen,

* A homœopathic physician attended a woman, æt. 42, who for fifteen years had been unsuccessfully treated for Articular Rheumatism, and found the following symptoms:—Complete helplessness; pain only endurable with perfect rest, but excruciating with slightest movement; wrists, elbows, and knees swollen, and unable to bear even slight pressure; anchylosis in knees and ankles, intense pain on movement of the lumbar vertebræ. *Kali.-Hyd.*, grs. v. aquæ ʒij, one teaspoonful every twelve hours. In two weeks pains when resting and upon touch were totally removed. Larger doses were continued. In seven weeks there was freedom from pain, ability to rise or lie down unassisted, and to walk feebly; swellings also decreased. By the end of the following month stiffness disappeared and household work was resumed.

stiffened, almost immovable joints; slightest attempt to rise occasions torture in the lumbar vertebræ; *chronic* induration and enlargement of the glandular structures; affection of periosteum; syphilitic complications.

Rhododendron.—Rheumatic pains worse during rest, in the warmth of bed, and with every unfavourable change of the weather, especially during the prevalence of east winds; swelling and redness of both the large and small joints, tension, and rigidity.

Ledum Palustre.—Predominant *chilliness*, associated with Rheumatism of the small joints.

Dulcamara.—Rheumatism from exposure to *damp*, with œdematous swellings, and somewhat relieved by rest.

Pulsatilla.—When the knee, ankle, or instep, is affected; and when there are *fugitive* rheumatic pains in various parts of the body; especially in females with scanty period.

Cimicifuga.—Local forms of Rheumatism, Lumbago, pain in the side; also *heart complications* from Rheumatic fever. Wandering-rheumatism is also within the *role* of *Cimic.*

Phytolacca.—Chronic cases with stiffness of the joints, and even loss of the use of the limb. When the *periosteal covering is implicated*, *Phyto.* is more strongly indicated; also *Mez.* or *Guaiac.* for this last special symptom.

Arnica.—Stiffness in the large joints; tearing pains in the small, with pricking; sensations as if the parts were *bruised;* Rheumatism associated with a previously injured part.

Causticum has been found useful in rheumatic swelling and stiffness of the joints, *contraction of tendons*, shooting and tearing pains, especially in scrofulous patients.

Mercurius.—Puffy swelling of the affected parts; the pains feel as if seated in the bones or joints, and are increased by warmth, and at night; there are also chills, and *profuse perspiration*, which do not give relief.

Sulphur.—Either before or after the above remedies, as an intercurrent remedy, or to complete the cure. It is especially useful in *Rheumatism from hereditary taint*, and when it is associated with *eruptions.*

Calc. C.—Patients who suffer from acidity, cold clammy hands and feet perspiration, pains worse by motion; *Iod.*,

stiffened joints, with thickening of surrounding tissues ; *Dulc.*, from damp ; *Ac. Benz.*, when the right knee is affected most ; *Caul.*, when the small joints of the hands and feet are affected.

K.-Bich., *Bell.*, *Coloc.*, *Ran.-Bulb.*, *Berb.*, *Mang.*, and *Colch.*, may also be required.

Accessory Means.—Patients who are much afflicted with this complaint should reside in a warm, *dry* climate, if they are in a position to do so. At any rate, such patients should wear flannel or other warm clothing, and guard against atmospheric changes. The feet should be protected from cold and damp. Sleep should be encouraged to soothe the system and induce perspiration. Wet compresses, covered with dry flannel, over the affected joints are always useful. Sometimes warm baths, especially of salt-water, vapour, or hot-air, are most useful. The old-fashioned practice of putting "flowers of sulphur" inside the feet of the stocking, when the legs and feet are chiefly affected, is not without its recommendation. To these means may be added friction with *Liniments*, medicated with *Arn.*, *Rhus Tox.*, or other remedy indicated.

The joints should be rubbed every night with Pine oil, and wrapped in Pine wool, woollen under-garments, or else made of Pine wool are a necessity.

Lastly, the *diet* should be easy of digestion, as attacks are often occasioned by disorders of the stomach. Beer and strong wines should be avoided. Cod-liver oil should be given to nourish and warm the system.

65.—Acute Gout (*Podagra acuta*).

Definition.—A specific febrile disease, usually occurring in paroxysms at longer or shorter intervals, characterised by excess of uric acid in the blood, which deposits urate of soda in the inflamed tissues of the cartilages and ligamentous structures of the joints, and by non-suppurative inflammation with

considerable redness, pain, and swelling of certain joints—chiefly of the hands and feet, and, especially in the first attack, of the great toe. The disease is constitutional and generally hereditary, and a "fit of the Gout" is always associated with derangement of the digestive and other organs.

Causes.—Gout is undoubtedly hereditary, but it may be acquired. More than half the patients can trace the disease to hereditary taint. Large-built men, of a luxurious mode of life, particularly if addicted to indulgence in *wine* and *malt liquor*, animal food in excess of what is required for the nutriment of the system, combined with too little exercise, are very liable to the disease, whether a predisposition has been transmitted or not. That wine and malt liquor have a greater tendency to the production of Gout than distilled spirits, is proved by its prevalence in countries or cities in which those beverages are largely consumed, and its absence where distilled spirits are almost exclusively taken. Thus Gout is more frequent in London, where porter and beer are largely partaken of, than in Edinburgh, where the favourite beverage is whisky. It is very common amongst brewers' men; also amongst ballast men employed on the Thames, who sometimes drink from *two to three gallons of porter daily*. It prevails largely in Germany, and in most countries where beer is the ordinary beverage of the people. *Port-wine* has a marked reputation, and probably justly, for causing Gout; and sherry is by no means a harmless beverage. It is chiefly a disease of the *male* sex, although occasionally women of a robust and plethoric habit suffer from it, after the cessation of the catamenial function. That luxurious living and an inactive life are at least exciting causes of Gout seems evident from the exemption of working people in rural districts from the disease, and from the liability of non-commissioned officers to the affection, who, when previously drilled and exercised as privates, knew nothing of the disorder. Even when the disease does occur in poor people, it is chiefly in persons who have previously lived fully and inactively, such as the servants of wealthy families—butlers, coachmen, etc.,—men who often live more luxuriously and idly than their masters.

The connection existing between Gout and convivial excesses

is proved by the much less frequent occurrence of the disease consequent on improved habits in diet. The heroic appetites of our chivalrous ancestors, the bold barons of feudal times, who used to treat their guests to an ox roasted whole, and the suppers of Lucullus, are past and gone. We are less partial to animal food, our meals are shorter, our potations less deep, and as a consequence Gout has gradually declined.

Unless the gouty diathesis be very strong, the actual manifestation of the disease may generally be averted. Moderation in food and drink, physical exertion, and temperate and industrious habits of life, will secure exemption.

The influence of *lead* in the production of Gout Dr. Garrod believes to be considerable; he has observed that a large percentage of the gouty patients that came under his care in hospital practice consisted of painters, plumbers, or other workers in lead.

Among the *exciting causes* of Gout is *Indigestion*, especially that form of it which favours the production of an excessive amount of acidity, and a less alkaline state of the blood, thus occasioning the insolubility and deposition of the urate of soda in the tissues. During an attack of Gout, uric acid is absent from the urine, the kidneys not excreting it; hence it collects in the blood, and may be detected by the microscope (after the addition of a little Hydrochloric Acid) in minute crystals upon threads immersed in the serum.

Season and climate have much influence in exciting a paroxysm of Gout. First attacks are most common in spring; as the disease becomes more confirmed, an autumnal seizure is added; after the lapse of a long time, a fit may occur at any season, and at most irregular intervals.

Exertion or great fatigue, a long walk, violent nervous excitement or anxiety, a sprain of a joint, a fall, exposure to cold or wet, or anything that disturbs the circulation, may excite the abnormal action which causes the gouty deposit.

Symptoms.—As an acute attack of Gout is often occasioned by an excessive debauch, or over-fatigue, impairing the digestion, its onset commonly commences an hour or two after midnight, when Indigestion from a supper or late dinner makes itself felt. Ordinarily a patient retires to rest in his accustomed

health, but awakes *early in the morning* with severe pain, chiefly in the metatarso-phalangeal joint, or the ball, of the great toe, which on examination is found to be *red, hot, swollen,* and so exquisitely *tender* that the mere weight of the bed-clothes is intolerable, and even the vibration of a heavy footfall in the room causes great discomfort. The veins proceeding from the toe become turgid with blood, and surrounded with more or less œdema. On the first accession of pain, there is generally cold shivering, which gradually subsides as the pain increases, and is followed by symptomatic fever. The patient is perpetually shifting his foot from place to place, and from posture to posture, finding no relief. At length, if suitable precautions are taken, and the foot kept in a horizontal posture, the pains subside in the early part of the day; but at evening an exacerbation takes place, which persists during most of the night, and subsides again towards morning, when sleep, with gentle perspiration, takes place. Sometimes the pains remit so suddenly that the patient attributes the relief to his having at last found an easy posture. The same series of symptoms recur, in a less severe form, for some days and nights, varying considerably in different cases, and being greatly influenced by the treatment adopted; and then the attack passes off, not to return for one, two, or, after a first attack, perhaps for three years. After the lapse of years, however, the intervals between the attacks are liable to diminish until the patient can scarcely ever calculate upon being free. The joints of the fingers and toes become enlarged and disorganised by deposit within and without the synovial cavity of *urate of soda*, commonly called "chalk-stones." The Gout thus becomes *Chronic.*

It is not uncommon, even in a first attack of Gout, for both great toes to be implicated, generally alternately, the inflammation rapidly subsiding in one joint to appear in the other, but sometimes simultaneously. In many instances, after first attacks, other joints—the instep, the ankle, the heel, or the knee—are affected at the same time; in rarer cases, some joints of the upper extremities.

During the paroxysm the elimination of uric and phosphoric acid is insufficient, the blood at the same time being unduly

impregnated. For the first fourteen days, the urine is diminished in quantity and deposits a red gravelly sediment; as the attack passes off, the quantity and ingredients become normal. With the decline of the disorder, there is also intense itching of the foot, especially between the toes, and desquamation.

Differences between Gout and Rheumatism.

GOUT.	RHEUMATISM.
1. In the earlier attacks, the *small joints* are affected, the metatarsal joint of the great toe being chiefly implicated.	1. The *large joints* are chiefly implicated, several being affected at the same time, or by Metastasis.
2. Rarely occurs *before* puberty, and generally not till from thirty-five to fifty years of age.	2. Generally *occurs in the young*, from twenty to thirty years of age, and often earlier.
3. Is more frequent in *men* than women, and in the latter rarely till after the cessation of the menstrual function.	3. Affects *men and women* equally.
4. Is often the punishment of an *idle*, luxurious, and intemperate life.	4. Is the lot of the *poor*, the hard-working, the exposed, and the ill-clad.
5. Is *strongly* hereditary.	5. Is but *slightly* hereditary.
6. Is associated with *chalk-stones* (urate of soda) in the external ear, on the tops of the fingers, or other situations.	6. Is never associated with chalk-stones.
7. The blood is impregnated with *uric* acid.	7. The blood is impregnated with *lactic* acid.
8. A fit of Gout often affords great *temporary relief*, so much so that patients are often sent to Bath to obtain one.	8. An attack of Rheumatism has *not one redeeming feature* in it, and patients are sent to Buxton to get cured, if it be possible.
9. Is confined to the *temperate regions* of the world.	9. Rheumatism appears to *prevail in all climates*, and has been called an ubiquitous disease.

Symptoms preceding an Attack.—Flatulence, Heartburn, *acidity*, dull pain in the left side of the chest, relaxed or confined bowels, and other disorders of digestion. In some patients, the function of breathing is implicated, or the liver deranged; in

others, the nervous system is involved, with Palpitation; or there may be alteration of the urinary secretion, or a crampy condition of the muscles. Such symptoms are no doubt consequent on the altered state of the blood, which always exists prior to the development of a gouty paroxyms. An attack is not, however, always ushered in by these premonitions, but may come on suddenly.

Complications.—By injudicious treatment, especially by the application of cold, the disease may be shifted to some internal organ, such as the stomach, the brain, or the heart; or to the sciatic nerve and neurilemma; in which case it constitutes *gouty Sciatica*. Should any organ or function be specially implicated, it is then termed *irregular Gout*. Carbuncle frequently occurs in persons of a gouty diathesis.

Epitome of Treatment.—

1. *During an attack of Gout.*—Colch., Acon. (*general feverishness*); K.-Hyd., Bry., Apocyn., Gels. (*Gout in stomach or bowels*).

2. *External applications.*—Acetic Ac. *Formula.*—Acet.-Ac. Sp. gr. 1.044, ʒj.; Spt. Vini. ʒvj.; Aq. Dest. ℥vj.; mix. Dr. Hastings recommends the inflamed part to be bathed with the lotion, and cloths saturated with it kept constantly applied, and covered with dry flannel. He has applied this lotion, administering *Acon.* internally at the same time, with excellent results.

Lotions of Acon., Colch., or of any other drug which is being administered internally, are also often employed with good results.

3. *Between the Paroxysms.*—Puls., Nux; Rob. (*acidity*); Cham., Merc.-Iod., Bry., Rhod., Led. (*rheumatic gout*); Rhus, Arn., Sulph., Lyc.

Sabina (when connected with uterine disorder); *Nat. Mur.* (coldness, constipation); *Ac.-Oxal.* (congestion, pain in spine); *Cup., Met.* (angina-like pain at the heart).—*J. H. Clarke.*

Leading Indications.—

Colchicum.—This remedy bears a homœopathic relation to Gout, and is best administered in comparatively large, and frequently-repeated, doses, as follows:—A drop of the strong

tincture every twenty, thirty, or sixty minutes, according to the intensity of the pain, and until it subsides. *Colchicum* is used both in the new and in the old school of medicine, with this difference, that all the good effects of the remedy are secured by the small doses of the former, without any of the injury the large doses of the latter entail. "*Colchicum* has a direct controlling power over the joint-disease, and I cannot call to mind a single instance in which its influence was not well marked" (*Garrod*). This is the experience of all homœopathic practitioners.

Kali-Hydriod.—The influence of this medicine on the excretion of urea is very marked. Both acute and chronic cases have been cured by it. It may be employed externally and internally, and should be given in somewhat large doses.

Bry.—In drop doses of strong tincture frequently given, this remedy relieves pain, particularly where the digestive functions are specially deranged.

Podophyllum.—In addition to the more closely indicated remedies, *Podoph.* (ix), in two-grain doses, morning and night, is often of great service.

Accessory Measures.—During an attack of Gout, the affected limb should be raised, so as to favour the free return of blood to the heart; the application of flannels wrung out of hot water, hot bread-and-water poultices, or *spongio-piline*, after immersion in hot water, often do good; or the *Acetic-Acid lotion*, before recommended, may be used. In acute attacks, the patient should be restricted to farinaceous diet—arrowroot, tapioca, sago, bread, etc.—and milk; water, or toast-and-water, *ad libitum*. As the febrile symptoms decline, a more generous diet may be gradually allowed; at the same time, the patient should resume daily moderate out-of-door exercise as early as he is able. Frictions with oil are often of great utility; also a course of Friedrichshall or Carlsbad water.

Preventive Treatment.*—

1st. *A well-chosen diet.*†—This should include both animal

* The preventive measures recommended in the Section on "Calculus" should also be consulted.

† See author's work on "Essentials of Diet," Second Edition.

and vegetable food, be adapted in quality and quantity to the ability of the stomach to digest, and at the same time furnish sufficient nourishment out of which pure blood can be formed. An excess of nitrogenous food should be avoided. Soles, whiting, and codfish; mutton, tender beef, fowl, and game, may be eaten. Salmon, veal, pork, cheese, and highly-seasoned dishes are unsuitable. The consumption of animal food should be moderate, and acidity guarded against by avoiding pastry, greasy or twice-cooked meat, raw vegetables, highly-seasoned food, and anything likely to lead the patient to eat more than is strictly moderate. The wines most likely to injure are port, sherry, and madeira. If wine be taken at all, good claret, free from sugar and acidity, is best; but where the gouty diathesis exists, any kind of wine may bring on a paroxysm. Stout, porter, strong and old ales, are almost as objectionable as port wine. Light bitter beers, like light wines, may be taken, but with the risk of exciting the disease. When Gout attacks a patient early, entire abstinence from all alcoholic beverages is one of the most likely measures to check its future development; but aged persons, and others whose health has been much enfeebled, may be allowed a small quantity of stimulant, as the particular circumstances of each case may seem to justify. Pure spirit, such as whisky, hollands, or brandy, mixed with water, will alone agree with gouty subjects. But each case must be considered by itself, and treated according to its speciality.

2nd. *Healthy action of the skin.*—This should be promoted by bathing, warm clothing, Baden towels, bath-brushes, etc., for much excrementitious matter is got rid of in this manner. Friction over the whole surface of the body is extremely useful when exercise cannot be taken. The patient should be well rubbed with a flesh-brush, or with the hands, twice a day.

3rd. *Good habits.*—A life of indolence should be exchanged for one of activity and usefulness. Exercise, not severe or exhausting, should be taken *regularly*. Walking, so as to secure an abundance of fresh air, must ever be considered the best exercise, but it may be conjoined with riding. Without

sufficient exercise, probably every other measure will be unavailing. Early and regular hours should be adopted, and severe or prolonged mental application avoided. In some cases, removal to a warm and dry climate during winter and spring may ward off subsequent attacks.

66.—Chronic Gout (*Podagra longa*).

Definition.—A persistent constitutional febrile disease, characterised by stiffness and swelling of various joints, with deposits of urate of soda.

Symptoms.—The deposits in the joints constitute the distinguishing feature; chronic stiffness and swelling of various joints, with pain, are considered as cases of chronic Rheumatism. The original condition of the *Chalk-stone Deposits* is that of a liquid, rendered more or less opalescent from the presence of acicular crystals; as the fluid part is absorbed, the consistence becomes creamy, and at last a solid concretion is deposited. When the effusion is confined to the cartilages, unless very excessive, the injury to the mobility of the joint is comparatively slight; but when the ligaments are infiltrated, they are made rigid, and the play of the parts is consequently interfered with. If a bursa has been infiltrated, the resulting "chalk-stone" is free and of uniform composition, but the distortion is considerable. The visible occurrence of these deposits is not constant, but when they do occur in any patient, no possible doubt can exist as to the nature of the case, for, as the deposition of urate of soda in the tissues occurs only in Gout, its presence constitutes a sufficient pathognomonic sign.

The attacks of pain are not so intense as in acute Gout, but they are more constant. Distortion of the joints, anchylosis, digestive and renal derangement, are often very distressing and serious. The urine is abundant, but pale and of low specific gravity; it is deficient in uric acid, but frequently albuminous. The concretions sometimes occasion ulceration and suppuration, when there is a discharge

of urate of soda mingled with pus; unless excessive, however, these discharges afford relief and conduce to better health.

EPITOME OF TREATMENT.—

Sub-acute Gout.—Colch., Sulph., Led.

For the gastric symptoms.—Ant.-Crud., Puls., Rob., Merc., Nux V., Sulph.

LEADING INDICATIONS.—

Colchicum.—This drug exerts a powerful influence in diminishing the sub-acute inflammations in old-standing cases.

Pulsatilla.—Wandering pains, especially when those dyspeptic symptoms exist for which this remedy is suited.

Antimonium Crud.—Gastric derangements, white-coated tongue, nausea: pains increase after eating; gouty nodes.

Nux Vomica.—Sub-acute attacks brought on or aggravated by indulgence in wine, heavy suppers, or late dinners. Constipation, Piles, Spasms, etc., are additional indications.

TREATMENT OF GOUTY DEPOSITS.—The following simple method Dr. Broadbent has found effectual:—Wrap the hands in linen or flannel dripping with water, warm or cold, and enclose them in a waterproof bag all night. This very speedily removes inflammatory stiffness, and, little by little, the concretions of urate of soda soften, frequently disappearing entirely. Dr. Broadbent has, in other cases, applied alkaline and nitric acid solutions to one hand, while water alone has been applied to the other, and has come to the conclusion that water is the agent in the process of removal. When urate of soda is once deposited round the joints it is extra-vascular, and not readily acted on through the blood; but when water is absorbed through the skin it is dissolved and carried away.

67.—Cancer (*Carcinoma*)—Malignant Disease (*Morbus malignus*).

Definition.—A deposit or growth of a delicate fibroid structure formed of meshes, enclosing non-united and non-uniform granules, nuclei, and cells, whose tendency is to spread indefinitely into the surrounding structures, and in the course of the lymphatics of the part affected, to reproduce itself in remote parts of the body, and to proceed to ulceration and ultimate exhaustion of the system. With the general marasmus atrophy occurs, and the consequent derangement of the circulation hastens the fatal issue.

Constitution and Cachexia.—Cancer is now generally believed to be a constitutional disease, meaning thereby that a special constitutional condition precedes the formation of a local cancerous growth. It was long believed that Cancer was strictly hereditary, but recent investigations have shown that it is only so to a certain extent. The cancerous *cachexia* may be induced by excessive mental pressure, especially if associated with anxiety. Indigestion follows, with loss of nourishment, and the cancerous cachexia results. It is in the condition that *precedes* Cancer, especially as met with in *medical* rather than in *surgical* practice, that we can effect the greatest good; for if we can lighten the pressure from the brain and the heart, prescribe rest and change of habits and climate, and correct the indigestion by our remedies, we may probably avert the development of the cachexia. But when the cachexia exists, a trifling cause may act as an excitant; a gall-stone, or direct disturbance of the gland, may fix the disease in the liver, or a blow may determine the growth of *Cancer* in the breast. When once a true cancer-growth exists, the opportunity for certain *curative* treatment has probably passed, although even then much may be done to mitigate pain, improve health, and prolong life.

Females are more liable to Cancer than males, in the proportion of three to one, fully one-third of all cases being situated in the female breast, which is especially liable to be invaded at that period of life when the reproductive organs are undergoing degenerative changes. The disease is most common between forty and fifty years of age.

Distinctions between Malignant and Non-Malignant Tumours.

Malignant or cancerous tumours differ from non-malignant in several important respects, chiefly in the following:—

MALIGNANT TUMOURS.	NON-MALIGNANT TUMOURS.
1. Are of *constitutional* origin.	1. Originate in some *local error* of growth.
2. Are not surrounded by any cyst, but *invade the surrounding tissues* and convert them into a structure like their own.	2. Are limited by a cyst, and although they may *compress* they cannot *invade* the neighbouring tissues.
3. Cancer material is short-lived from rapid deterioration, but is as rapidly reproduced.	3. Have an *uncertain period of increase*, after which they may remain stationary.
4. Are attended with severe *pain*, which gradually increases in severity.	4. Are usually *un*attended with pain.
5. Extend to *remote parts* of the body, and re-appear there chiefly in the course of the Lymphatic glands.	5. Are local, and have no *disposition to spread* to distant parts of the body.
6. Are associated with an *impaired* state of the *general health* called the cancerous cachexia.	6. May impair or obstruct the functions of parts upon which they press, but such *inconveniences cease* when the tumours are removed.
7. If extirpated, they almost invariably *recur* in the same or other part, and prove fatal in the end.	7. If effectually removed do *not* usually *return* either in the same or in any other part.

Varieties.—The most common are the following: *Scirrhus, Medullary, Melanotic, Epithelial,* and *Osteoid.*

Scirrhus is the most frequent in this country, and its common primary site is the *female breast.* It is, however, often met with in the rectum, the uterus, the testes, etc. Although described as a *tumour,* Scirrhus has the singular property of drawing into its own substance adjoining structures and compressing them into less space than that which they previously occupied, and it is only when there is a considerable growth of the disease, with Œdema, or wasting of the part it occupies, that there is the appearance of enlargement. It is thus adherent to the surrounding tissues. Other tumours move amongst them, but Scirrhus moves only with the breast

as a whole. The adhesion of Scirrhus to adjoining structures is well exemplified in the rectum, which it tightly constricts; and in the breast, in which the shortening of certain subcutaneous fibres produces a *dimpling* or *pitting* of the skin; or if it occurs in the milk-ducts, it retracts the nipple; or in the submammary tissues it limits the movements of the breast over the pectoral muscles. Scirrhus grows chiefly by superficial increase, causing an irregular, nodulated, fissured surface, and it extends mainly on the side of the chief arterial supply.

Epithelial Cancer, also called Epithelioma and Cancroid, is less malignant than Scirrhus and Medullary Cancer, and is more frequent in the male, just as Scirrhus is in the female. Its primary site is in the skin, chiefly near the mucous orifices —the edges of the mouth and the eyelid, the anus, vulva, prepuce, scrotum, and on or near any orifice clothed with epithelium. It has an almost exclusive preference for the lower of the two lips, and of the eyelids. It grows also on the skin, the tongue, and *os uteri*, and not unfrequently on old scars, chronic ulcers, sinuses, on the tongue near a broken tooth; on the lip from the irritation of a clay pipe resting on it, the contact of soot with the skin, and even on old-standing unhealed bunions. The *Cauliflower excrescence* of the *os uteri* is of the nature of Epithelial Cancer. On the scrotum it forms the almost extinct *chimney-sweeper's Cancer*. This variety has its correlative, and often its consequent, in *Acne*, which is due to an unhealthy condition of the epithelium lining the sebaceous follicles.

Epithelial Cancer is less inimical to life than the other varieties, and there is a much longer average duration between its excision and that of its return; and further, it is the only form which has been satisfactorily associated with *previous disease or injury*.

Medullary or Encephaloid Cancer is so named from the brain-like appearance it presents on section. It differs from Scirrhus mainly by its softness. It is sometimes called *Fungus Melanodes* or *Hæmatodes*. It is thought to be more serious than hard Cancer, because associated with a profounder constitutional taint, and is almost exclusively the

variety which occurs in the *young*. It chiefly differs from Scirrhus in the following points :—

SCIRRHUS.	ENCEPHALOMA.
1. Is *hard*.	1. Is *soft* and brain-like.
2. Appears most frequently on the *female breast*.	2. Appears most frequently on the *limbs*.
3. Comes as a *distinct* hard "kernel" or tumour, *movable* beneath the skin.	3. Is at first *deeply seated*, and difficult to recognise.
4. Becomes *fixed* to adjoining textures, which it *draws* and *puckers*.	4. Spreads through the loose textures, which it *pushes aside* and *distends*.
5. Is *single*, and grows *slowly*.	5. Presents *numerous* tumours, and grows *rapidly*.
6. Cachexia developed *late*.	6. Exhaustion and cachexia appear *early*.
7. Runs its course slowly, from *two to four years*.	7. Generally proves fatal in from *one to two years*.
8. Never occurs in the young.	8. Often occurs in the young, even at birth.

Encephaloma is distinctly *vascular*, and often attains a large size in a short time, and inasmuch as it is more decidedly constitutional than Scirrhus it is sooner fatal. It is most common in the limbs, especially in the intermuscular spaces and the cancellous extremities of the bones. At first, the swellings are deeply seated, and cognizable rather by local tenderness than by their enlargement ; but afterwards they become very considerable masses, and, in favourable situations, rise to the surface in irregular, globular projections, often so elastic as to give the impression of their being *cystic*.

Osteoid Cancer is primarily single, and hard like ivory or bone ; but secondary growths are less solid, and crumble to pieces after maceration. The primary site is usually in bone, especially in the lower end of the femur. This rare disease is often very painful and rapid in its progress ; indeed, no other variety propagates itself more widely and readily than this ; but there is evidence in favour of early and repeated excisions.

Causes.—Residence in a low, damp locality, near the bed

of a river; bruises; irritation of moles or warts, particularly by *caustic;* chronic Dyspepsia; nervous and physical exhaustion. The exciting cause is to be found in influence acting upon each organ, and perhaps upon a single part or texture of the organ in which the primary growth takes place. Cancer is essentially a disease of degenerated tissues, occurs in degenerated organs, and is due, sometimes to one thing, sometimes to another.

Prognosis.—In order to comprehend the true character of any given case, a history of the diseases from which the patient has previously suffered should be carefully made, also of any exciting causes of the tumour that may have been in operation. If the general health is good, and the disease is but recent, a somewhat hopeful prognosis may be given; but when secondary symptoms are developed—swelling of the glands, and a sallow, rusty complexion—only slight hopes of a cure can be entertained.

Mode of Death from Cancer.—The natural tendency of cancerous tumours is manifested in a steady and certain progression towards death. In some few cases, the cachexia is believed to be the sole cause of the fatal result, irrespective of the morbid materials in the body, such patients possessing only a *feeble resistance to death.* In patients possessing a vigorous nervous system, the disease persists till the constitution is exhausted by suppuration or hæmorrhage, excessive growth, *pain, sleeplessness, sickness,* and *non-assimilation of food.* Some cases are fatal by Pneumonia, Pleurisy, or effusions into the serous cavities. Others from obstruction or constriction of some canal, as the duodenum, rectum, or œsophagus; or of the *ductus communis choledochus,* causing Jaundice; or of the pharynx or œsophagus, causing starvation. Finally, an external cancer may be supplanted by a fatal growth of Tubercle, or Cancer, in some internal organ of the body.

Treatment.—The treatment of Cancer cannot be commenced too early. Its cure involves the destruction or elimination of the morbid materials. Whether or not there is any remedy known which is capable of effecting this is a disputed point. However this may be, of this we are certain,

that our remedies have great power to mitigate the sufferings attendant on this malady, to prolong life very considerably, and to smooth the otherwise miserable pathway to the grave, and these results can be attained even when it is impossible to effect a cure.

Arsenicum.—We can testify to the priceless worth of this remedy, in different dilutions, perseveringly administered; it has arrested the growth, and gradually dispersed the cancerous enlargements; the cases referred to were marked by the severe pain and the general cachexia of true Cancer. The value of this drug is also often expressed by the restoration and maintenance of the patient's general health. Dr. Helmuth's statement that the cases which in his experience have longest resisted the disease, were invariably those in which medical treatment was persevered with, and in which the chief remedy was *Arsenicum Alb.*, or *Fowler's solution*, exactly accords with our own experience.

Hydrastis Canadensis * has been much extolled, and is undoubtedly useful when the Cancer involves the *glands* or the *uterus*, the glands being dark, mottled, and much puckered; and the cachexia fully developed. We use it both internally and externally.

Conium is chiefly beneficial in Cancer of the *breast*. In open Cancer of the breast, a lotion of *Coni.* is very soothing to the pain.

Carbo Animalis has effected much improvement in the discharges of Cancer, and has also *revived the dormant energies* of the system.

Thuja may be chiefly depended on in the simpler varieties, as in *Epithelial Cancer.*

Aurum.—Cancerous affections of the *bones.*

* Mr. Clifton informs us of a case of Cancer of the upper lip and tongue much improved by *Hydrastis;* when this remedy ceased to do good, further improvement resulted from *Galium Aparine.* Equal parts of the matrix tincture and glycerine; a few drops smeared on the lip and tongue twice a day. As much would be thus absorbed, it was not given in any other way. Eventually the patient recovered, some trifling induration and fissure in the tongue only remaining. Indeed, so strongly did the patient believe the disease cured, that in spite of the warning of his medical attendant, he began again to smoke with short clay pipes!

Kali Brom.—Cancer of the brain or nervous system causing *Convulsions.*

Carbolic Acid.—Dr. Pease, of Boston, U.S., and Dr. Beebe, of Chicago, rely upon the internal and external use of this remedy, by which means they claim to have cured cases of several years' standing. It is specially valuable after excision to prevent recurrence. See also *Sanguinaria.*

Galium Aparine.—This plant has some reputation in the treatment of Cancer of the tongue, several of which are said to have been cured by its means. It is believed to favour the production of healthy granulations on the ulcerated surfaces.

Hydrocotyle Asiatica.—Uterine Cancer.

Sanguinaria Canadensis.—Dr. Craig relies very much on this remedy to prevent the return of disease after excision. It has been employed in escharotic treatment.

Phos., *Bell.*, *Nux V.*, *Sulph.*, *Kreas.*, *Sep.*, *Phyto.*, *Sec.*, *Iod.*, *Plat.*, and *Calc.*, have each reputed virtues, but we have had little experience with them in the actual disease, except as correctives to the cachexia.

Dr. Gilchrist, a high authority on Tumours, recommends *Apis Mel.*, when the symptoms are worse in the morning, and from warmth, relieved by cold water and pressure.

Dr. J. Compton Burnett says in his monograph (" Tumours of the Breast, and their Treatment and Cure by Medicines "), *Apocynum Can.* as an ointment is powerfully solvent; *Arg. Nit.* (useful in cutaneous cysts); *Ars. Iod.* (has cured cancer of the breast, also of the womb); *Aur. Mur.*, *Nat.* (probably the best remedies we have for uterine tumours); *Barium* (lipomata); *Bellis Perennis*, *Bryonia* (where the peritoneum is probably involved in the ovarian tumours); *Cundurango* (cracks in angles of mouth, stomach pains); also *Coloc.*, *Ferr. Ac.*, *Sil.*, *Lapis Alba.*, *Urea*, *Thuja*, *Psoricum*, *Æsculus*, *Graph.*, *Heclæ Lav.*, *Vaccininum*, and *Variolinum* are, he demonstrates, all valuable tumour remedies.

The use of *Galvanism* and *Electricity*, although the facts adduced are still few and not quite satisfactory, promises to be an important mode of treatment.

Local Treatment.—In ulcerated cancerous tumours, the fœtor may be greatly diminished, and the patient's and at-

tendant's comfort promoted, by solutions of *Carbolic Acid*, *Condy's Disinfecting Fluid*, and the internal and external use of *Carbo Vegetabilis*, or *Charcoal*.

Charcoal *poultices* are soothing applications to open Cancers, favour a healthy condition of the sore, and possess deodorising properties. For this purpose, bread is better than linseed meal. In making the poultice, a little charcoal should be mixed with the bread, but the greater part of it should be sprinkled over the surface of the poultice. *Glycerole of Tannin*, and *Glycerole of Carbolic Acid*, mixed, are very useful applications in uterine Cancer, by moderating the excessive discharge, and neutralising the offensive odour. Copious warm-water *injections* relieve the pain from Cancer of the intestines, and at the same time remove or modify a very distressing desire to evacuate often experienced in intestinal Cancer.

Powdered *Chlorate of Potash*, sprinkled over the open sores, and covered with a wet compress, is even more effectual in removing the fœtor; it also promotes healing. Small crystals are more powerful than the powder, but should not be applied at first. The author has used *Chlorate of Potash* locally with great success. *Perfumed Carbolic Acid* is also of much value; it may be used locally, and diffused through the room by the spray-producer. Further, fresh-ground coffee is a valuable deodoriser in open cancerous sores.

Palliatives.—*Morphia.*—The hypodermic injection of this remedy is often of inestimable value in incurable and extremely *painful* cases.

Alcohol.—Delirium or excitement, *the effect of exhaustion*, may often be warded off, or modified, by the administration of alcohol.

Aconitum (*Radix*).—The Author, in a recent case of Cancer of very virulent character, found the strong tincture of *Acon.* of more service than any other remedy. Its power in relieving the agonising sufferings of the patient was striking; even when *Opium*, *Morphia*, etc., by hypodermic injection, could not be borne, *Acon.* lulled the pain, calmed the nervous excitement, and procured that much-needed blessing—sleep. It was given at first in half-drop doses, and gradually increased till two or three drops could be taken.

Operative Measures.—Connected with Cancer, the consideration of extirpation by the knife is important, and an opinion as to its desirableness can only be arrived at by the nature and circumstances of each case. Life is undoubtedly sometimes prolonged by removal of a cancerous tumour, and although it return afterwards, the operation is now quite painless, and the addition thus made to life may be one of comfort and usefulness. There is also the chance that the tumour may not be Cancer, but a non-malignant growth which excision might cure. On the other hand, extirpation of the tumour cannot remove the true cancerous cachexia, and a patient may sink under the operation. Indeed patients have so sunk when tumours have been afterwards proved to be non-malignant.

Enucleation (as it is called) has been accomplished by the use of *Arsenic*. An incision is made at the side of the Cancer; a portion of arsenical paste is then inserted; this causes deep and active inflammation, which destroys the morbid growth and causes it to slough away. Other incisions are then made, one after the other, until the whole tumour is *enucleated*, and only a clean healthy sore remains. We cannot recommend the practice, as it is very painful and tedious, requiring much time to accomplish what may be done by excision in a few minutes. (See *Materia Medica—Arsenic.*)

Preventive Means.—*Change of Climate*, so commonly recommended in Phthisis and other grave diseases, may be expected to be equally useful in Cancer. Pervading nearly every part of Europe, it is infrequent in Egypt, Algiers, Senegal, and Arabia. According to Haviland it is irregular in its manifestations even in England; for while it abounds in low-lying grounds through which large rivers are wont to overflow their banks in their descent to the sea, dry, elevated districts are comparatively exempt. It is highly probable, therefore, that incipient Cancer or the pre-cancerous cachexia may be arrested by a favourable change of climate. In the children of cancerous parents, preventive treatment should be adopted. See also under "Constitution and Cachexia," p. 272.

68.—Syphilis (*Syphilis*)—Venereal Disease.

Definition.—A specific ulcer or chancre, produced only by contagion, generally through an abrasion, from sexual connection with an infected person, the destructive action of the poison on the blood being marked by successive groups of phenomena, which begin to appear in about three weeks after absorption of the virus, and may continue to affect various tissues of the body for an indefinite period.

This subject is not a pleasant one to write upon, but it demands attention from its great prevalence, especially as seen in the out-patient departments of the Hospitals of London, and from the severity and duration of the syphilitic poison. The disease is occasionally contracted in an accidental manner, as from soiled water-closets, clothing, tobacco-pipes, drinking-glasses, or from a nurse to a nursling, or *vice versâ*. This poison often operates long after the apparent cure; abortion in early married life, or the premature death of the offspring; infantile diseases of the genitals and anus, wasting of the limbs, curvature of the bones, ulceration of tonsils and trachea, and general feebleness, are often evidences that the syphilitic virus has transmitted to the second or third generation the wide-spread evils of tissue degeneration from uncured syphilis, which have existed on the paternal or maternal side, in near or remote ancestors.

We use the term Syphilis in this Section exclusively to designate the disease when the constitution is implicated, and not to the "non-indurated" or "non-infecting" chancre, which is a local disease, and not followed by secondary symptoms.

1. *Primary Syphilis* is the name given to the specific ulcer, or chancre, while limited to the part inoculated and the lymphatic glands connected with it.

2. *Secondary* or *Constitutional Syphilis* describes the disease when it affects parts not directly inoculated—mouth, throat, tonsils, eye, and skin, from an extension of the disease through the blood.

In these stages, Syphilis is contagious, and too great care cannot be taken in preventing the discharges from coming in contact with another person.

3. *Tertiary Syphilis* is a term sometimes used to express symptoms which arise later in the disease, after an interval of apparent freedom—tissue changes resulting from tainted blood. According to Hutchinson, the secondary maladies are due to changes of the blood, and the tertiary to those of tissue. These changes include bone-diseases, cachectic Ulcers, fibro-plastic deposits, Nodes, etc. The Nodes or Gummata may form not only in the bones, but in the brain, heart, lungs, liver, eye, testicles, glands, muscles, and in the areolar tissue. Many cachectic conditions and obscure diseases are due to this virulent constitutional poison.

4. *Hereditary Syphilis* is constitutional Syphilis of an infant, received during fœtal life from one of the parents. The infant may be born healthy-looking, but its skin is often of a dull colour, and it has an aged expression.

Differential Diagnosis of Infecting and Non-infecting Chancre.

INFECTING CHANCRE.	NON-INFECTING CHANCRE.
1. Does not commence till about the *third week* after coitus.	1. Commences in from *twenty-four hours to three days.*
2. First appears as a *papule*, abrasion, or *crack.*	2. It appears as a *red spot*, quickly becoming a *pustule*, and then a soft *suppurating sore.*
3. Developes *slowly.*	3. Developes *rapidly.*
4. Discharge *slight*, unless the sore be irritated.	4. Suppurates *profusely.*
5. Is soon *limited*, and seldom becomes phagedænic.	5. Tends to invade and *extend* to the neighbouring structures or become phagedænic.
6. Microscopically, the discharged fluid possesses the character of *molecular débris*, and not of pus, except from accidental irritation.	6. Examined by the microscope, the discharge is found to consist of *pus-cells.*
7. A specific sore remains *solitary* after glandular enlargement and systemic infection, and it cannot be multiplied.	7. A non-infecting soft sore may be *transplanted at will* on the patient's body, and is seldom single.
8. Followed by numerous *hard* buboes.	8. A single bubo may appear, which tends to suppurate.

The primary stage of Syphilis is more prolonged than that of any other specific fevers. It is self-propagating, for, in common with other Zymotic diseases, the poison possesses the power of reproduction in the patient's body, and the smallest possible quantity of virus suffices in time to inoculate all the solids and fluids of the system. The time required, however, is much longer than for other constitutional disorders, and the *stages* are much more protracted. Instead of counting by days, we have to count by weeks and even months. As the disease may thus extend over years, its subject is rarely incapacitated by it for social life; indeed many, whilst still infected, become parents, and transmit their taint to their offspring.

This circumstance stamps the subject with grave importance. Great responsibility attaches to the medical man, of which he cannot be relieved unless he peremptorily refuse to sanction a matrimonial alliance so long as there is any probability that the health of the prospective wife or offspring may be damaged, and until he has good ground to be satisfied that the disease is thoroughly extirpated.

Symptoms.—After a period of incubation, varying from three days to seven or nine weeks, a small red spot appears, which rapidly rises, becomes transparent, breaks, and forms a sore, which spreads and has a peculiar character. Its form is nearly circular, the edges *hard* and cut clear, and the base greyish or lardaceous, or irregular as though worm-eaten. This is the ordinary form, frequently giving rise to secondary symptoms. A second form is the *soft* or superficial sore from which, as before stated, secondary symptoms do not result. The margins of the ulcer are elevated, the base is clean and of a fleshy-red colour, and the discharge is copious. The phagedænic Chancre is developed in scrofulous patients. Its edges are dark-coloured, thin and irregular, and the secretion thin and fœtid. It enlarges, rapidly destroying the parts. The sloughing chancre commences as a black spot and forms a livid, painful sore which eats rapidly into the neighbouring parts. It is of the first or hard chancre that we shall chiefly treat. The enlarged lymphatics of the groins become hard, and in some cases suppurate, while there is generally en-

largement and induration of the lymphatic glands in all parts.

After a longer or shorter interval, secondary symptoms may arise—eruptions of a copper colour, ulceration of the throat, tonsils, and soft palate, warty growths, inflammation of some of the membranes of the eye; pains in the bones and joints; febrile disturbance; Alopecia, etc. In the *Tertiary* form, there are ulcerations of the mouth and throat, tending to spread; ulcerations on the skin; diseases of the periosteum, cellular tissue, muscles, tendons, etc.

The symptoms of *Infantile Syphilis*, if not present at birth, generally come on within the month, and consist of Coryza, with difficulty of sucking, shrill hoarse voice, excoriations or ulcerations about the mouth, nose, buttocks, and flexures of the joints, copper-coloured skin, Iritis, Deafness, wasting, etc. There is also a peculiar physiognomy, with, according to Hutchinson, notching of the upper incisor teeth.

Diagnosis.—The skin is the favourite seat of the first manifestation of constitutional Syphilis, as it is the most superficial of tissues, and the effects of the disease gradually appear in the deeper. Antecedent or concomitant symptoms, and peculiarities of colour and form, usually enable us to make the diagnosis, which is a matter of vital importance. The enlarged inguinal glands, the great chronicity, the tendency to relapse, the dull coppery hue of the eruption, rounded form, proneness to appear on the face, and absence of itching, may be taken as diagnostic. The concurrence of periosteal pains, sore throat, or Iritis, make the nature of the case quite certain. Tenderness on and under the sternum is often present, and has been said to be pathognomonic. Polymorphism or variety of forms also characterises the syphilitic rashes.

The poison of the "infecting" sore of Syphilis does not, then, remain a mere local disease; it undergoes a marvellous process of elaboration like that of *Small-pox*, before its baneful effects are exhausted, and in its self-propagation may ultimately destroy life, by inducing tissue-degeneration and constitutional cachexia, or by causing grave lesions in such organs as the brain, lungs, liver, or kidneys.

EPITOME OF TREATMENT.—

1. *Primary Syphilis.*—Merc.-S. (*hard Chancre*); Ac.-Nit. (*Sloughing Chancre, or if Mercury have been given to excess*); Merc.-Cor. or Cinnabar (*combined Gleet and Syphilis*); Thuja (*warty growths*); Bell. (*inflamed and painful Buboes*); Ars.-Iod. (*Buboes, painful and threatening suppuration*); Phyto., Podoph., or Sulph. (*co-existing Chancre and skin affections*); and *Iodoform* externally.

2. *Secondary Syphilis.*—Ac.-Nit., Eryng.-Aquat., Merc., K.-Chlor. (*sore throat and mouth*); Merc.-Cor., K.-Hyd. (*Iritis*); Aurum, Stillingia, Sarsa. (*rheumatic or bone pains*).

3. *Tertiary Syphilis.*—K.-Hyd., Aurum, Phos., Ac.-Phos., Sil., Mez., Asaf. (*Nodes and bone diseases—Exostosis, Caries, Necrosis,* etc.); Ars., Ars.-Iod. (*cachectic Ulcers*); Aurum, K.-Bich., Calc.-C., K.-Chlor. (*Ozœna*); Aur., China, Phos., Carbo Veg., Ars. (*Syphilitic cachexia*).

4. *Hereditary Syphilis.*—Merc., Ac.-Nit., Aur., Phyto., China, Ars.-Iod., Sulph.

SPECIAL INDICATIONS.—*Mercurius Sol.*—This remedy stands in the front rank among the few that are capable of destroying the venereal poison in the system. Its pathogenesis contains nearly the entire phenomena resulting from venereal infection. It is of special value in the primary symptoms, and in inherited syphilis of infants and children.* Dr. S. P. Hedges, of America, has found that whenever it fails to cure, the diathesis of the patient is complex; so that no one remedy will alone effect a cure. It is specially indicated in Chancre with *red* edges, cheesy or lardaceous bottom, *painful,* and readily bleeding.

Acidum Nit.—Constitutional syphilitic ulcerations, especially the *inherited* ulcerations of children, and when the *mercurial Cachexia* has been *engrafted* upon inherited Syphilis. Also in primary Chancre, with spongy, elevated margins, not painful, but bleeding readily and profusely. The remedy should be

* Our allopathic contemporaries depend upon *Mercury* in the primary and secondary stages, and on *Iodide of Potassium* and *Sarsaparilla* in the tertiary. But excess of *Mercury*, as too often given by them, aggravates this disease, and accounts for the disastrous effects so frequently witnessed.

administered in both high and low dilutions, and not too hastily abandoned if one dilution has not answered.

In the case of sloughy (*eating*) ulcers, *Ac.-Nit.* should be used topically in a low caustic form, and thus will be found to act well with its constitutional administration.

Kali Hyd.—No remedy surpasses this as an antidote to the syphilitic poison in the secondary, and especially in the tertiary form of the *disease*. *Nodes*, *Gummata*, *Erythema*, *tubercular skin eruptions*, *Ulcers* on the tonsils, Periostitis, and Coryza are distinctly under its influence. The pain of *Nodes* is quickly relieved, and when not very chronic, the Nodes soon disappear. According to Ringer, large doses arrest the rapid sloughing of some syphilitic sores, and promote the healing process.

Mercurius Cor.—Chancre, with ichor adhering to the bottom, and discharging thin pus which stains the linen; combined Chancre and Gonorrhœa; Buboes; skin affections, the symptoms being worse in bed.

Cinnabaris.—Similar symptoms to the above occurring in *scrofulous*, indolent constitutions.

Arsenicum.—Gangrenous sores, with florid unhealthy granulations, which bleed on the slightest touch, and are painful and burning; or painless ulcers secreting *watery*, corrosive, and offensive fluid; rapid emaciation, prostrating diarrhœa, scaly skin, or malignant ulcerations in the secondary or tertiary stage.

Arsenicum-Iod.—According to Dr. H. Noah Martin, of America, this remedy excels all others for the rapid cure of *Venereal Bubo*. It quickly reduces and disperses acute swellings of the inguinal and axillary glands, even after the peculiar throbbing pains have set in, which seem to threaten suppuration. It should be used in the 2x or 3x trituration.

Belladonna.—As an occasional remedy, *Bell.* is very beneficial; especially in cases in which there is great *pain*, redness, and *erysipelatous* appearance.

Thuja.—*Warty growths* (*Sabina* if they are large, moist and *painful*); small warts on the iris; *mottled* eruptions.

Aurum.—Ulceration of the mouth and nose; *Ozœna*, bone diseases, Sarcocele. Particularly beneficial when the system

has been *broken down* by the combined influence of *Syphilis and Mercury*, and the mind, equally depressed, dwells upon *suicidal* thoughts.

Sarsaparilla.—Purulent vesicles, itching furiously; various skin affections.

Sulphur.—As an intercurrent remedy in all stages; in *superficial ulcer*, with a lardaceous base; when the disease threatens to assume a serious form, or is very obstinate; also of special value in *Sycosis*.

Phosphorus.—Affections of the long bones, or the jaw bones; and when a dry cough, burning, stinging pain, bloody expectoration, and great debility, indicate *danger to the lungs*.

Mezereon.—Exostosis, Necrosis, or Caries, particularly of the *shin-bones;* the part feels sore, and is aggravated by touch.

Clematis.—*Orchitis*, excrescences, scabies, tetters discharging bloody matter; pain and *irritation*, worse at night.

Accessory Means.—All wear and tear of the system, such as over-exertion of the mind in business or pleasure, must be avoided. Generous but plain diet, and avoidance of stimulants; comfortably-warm clothing, rest, fresh air, and moderate daily out-of-door exercise, and other good hygienic surroundings, are essential. Generally, a warm bath about twice a week, at bed-time, is advantageous; also daily cold or tepid sponging, with abundant friction by means of a *Bath-sheet*, on rising. The importance of thorough *cleanliness* in this disease may be inferred from the fact that some of the worst cases of primary disease have been successfully treated by prolonged warm baths. The septic discharge being removed as soon as formed, the sore heals much more rapidly than under ordinary circumstances. Cleanliness is not only valuable curatively, but, practised thoroughly and immediately, is the best *prophylactic*.

As a rule, simple lint soaked in tepid or cold water, and renewed every three or four hours, is the only application required for the local sore. But for primary sores and ulcerated glands (*Buboes*), a solution of twenty grains of *Chloral Hydrate* to one drachm of water is exceedingly beneficial. The healing process is regulated and hastened, and

auto-inoculation prevented by its use. *Powdered Chlorate of Potash* is another valuable local remedy, especially for removing fœtor and hastening healing. The powder should be sprinkled over the open sores and covered with a wet compress. As a topical application in sloughy ulcers, *Ac.-Nit.* has been already recommended. Lastly, for *soft* Chancre the *Lotio Nigra* (B.P.) is an excellent application, and either this or cold-water dressing is all that is necessary.

69.—Lupus (*Lupus*).

Definition.—A spreading tuberculous Inflammation and infiltration of the skin or mucous membrane, usually of the nose or face, in which a material of imperfect organisation and low vitality permeates the healthy tissues, and slowly, insidiously, and progressively destroys them by ulceration.

Varieties.—*L. Exedens* first attacks and most seriously affects the alæ of the nose; is papular, and becomes tuberculous by the aggregation and union of papules; is characterised by ulceration, which is at first superficial, but afterwards infiltrates the subcutaneous tissues.

L. Non-exedens commences on the cheek or lips, thence advances to the nose; extends slowly; is papular and becomes tuberculous as *L. exedens;* is characterised by atrophy, degeneration, and absorption of the dermic tissues, without any true ulceration.

L. Erythematosus, like *L. exedens,* begins on the alæ in the form of a circumscribed red patch which is scarcely perceptible, and is neither papular nor tuberculous; atrophy and absorption take place, but the dermic destruction is not so deep. Any of these varieties may pass into the other. All indicate a strumous or scrofulous diathesis, and all occur most commonly during the period of adolescence.

Rodent Ulcer, sometimes called *Lupoid* or *Cancroid* Ulcer, has some similarity to *Lupus* and *Cancer,* but differs from Lupus in these respects, that it is a disease of declining life, and is not connected with Struma.

Symptoms.—Lupus begins either as a red or brownish-red

papule, around which others gather, and with which they blend and form a tubercle; or as a shining, soft, circumscribed swelling of the skin, usually on one ala of the nose, which ulcerates; or else as a mere crack or small excoriation, covered with a thin scab, under which it slowly spreads. When the scab is removed, the discharge, which is scanty, semi-purulent, and viscid, soon dries and forms another large one. The Ulcer is constantly spreading in one direction, and healing in another; fresh papules, tubercles, and pustules appear round the circumference of the ulcerated patch. It may last for years, and wander over the whole face, completely destroying perhaps the alæ of the nose, or the eyelids, but in other parts not penetrating the entire thickness of the true skin. The cicatrix is excessively irregular and shining, of a dense whiteness, causing perhaps eversion of the eyelids or lips and distortion of the features; in some parts it feels soft and pulpy. The cause and pathology of this affection are unknown. When cured the patient is subject to the reappearance of the disease; if the new skin be soft, free from tenderness, and of a natural colour, permanency of cure may be hoped for.

Treatment.—*Arsenicum.*—This is the chief remedy, and by its persevering use, both internally (in various dilutions) and externally, we have witnessed most unpromising cases cured, or greatly benefited.

Iod., K.-Hyd., Merc.-Biniod., Hydras., Caust., Phyto., Syrup. Ferri.-Iod., and *Sulph.*, are also useful. All the remedies may be used locally as well as internally.

"*Calc. Carb.* (pale, stout subjects, heat and perspiration of head, cold, clammy hands and feet, acidity); *Hep. Sulph.* (sensitiveness of affected part, chilly); *Aur. Mur.* (syphilitic joint); *Kali Bich.* or *Hydrocotyle* afterwards."—*J. H. Clarke.*

70.—Leprosy (*Leprœ veræ, Elephantiasis Græcorum*).

Definition.—A constitutional chronic disease, invading the skin, mucous membranes, fibrous structures, the nerves, and the bones, characterised by a specific bronzed eruption, which hardens and produces insensibility, having also a tendency to

tubercle, ulceration, and death of the affected parts, indigenous to particular countries, and is chiefly prevalent in the locality of great rivers, lakes, and the sea-coast.

Varieties.—There are two forms, the *tubercular* and the *non-tubercular*; which, however, often co-exist, or follow each other, in the same patient, indicating that they are only modifications of the same morbid condition. The *non-tubercular* variety has been termed *anæsthetic*; but as the loss of sensibility characterises the later development of the other variety (the *tubercular*), the term is not sufficiently distinctive. The name *leucopathic* has been given to those cases of *non-tubercular* Leprosy where there are *white spots* or *blotches* on the skin, and which are anæsthetic.

Leprosy has an ancient history. It was described by Moses in the Book of Leviticus (chap. xiii.), and by Arœteus, and was unquestionably the Elephantiasis of the Greeks. In the middle ages, it was almost epidemic through the European continent, but it is now confined to a few localities, and has disappeared from Great Britain. It is, however, known in New Brunswick, Guiana, the West India Colonies, Sierra Leone, the Cape of Good Hope, the Mediterranean shores and islands, Spain, Portugal, Southern France, Sweden, Norway, the Baltic provinces, European and Asiatic Turkey, Persia, China, Australia (among the Chinese immigrants), and in the islands lying between the Cape of Good Hope and Ceylon. It is endemic and widespread throughout the whole of India.

The disease is hereditary, but, singularly, often fails to manifest itself in the first and third generations, showing greater intensity in the second and fourth, and usually following the maternal side. Males suffer more than females. Its development is not confined to any period of life, but most frequently occurs about puberty. It is not contagious;* but

* Dr. Someren, as the result of many years' experience in the capacity of medical officer to the Madras Leper Asylum, is convinced that the disease is not communicable by personal contact, and, with the view of dissipating the old and engrained traditional belief in the contagiousness of the malady, and in the hope of improving the condition of the suffering poor, recommends that that asylum should be converted into an extensive hospital for skin diseases generally. A similar reform is thought desirable in the infirmaries and sick asylums of our West India Colonies.

whether it can be transmitted by inoculation of blood or ulcerous matter, or by coition, is a disputed question. It affects the poor, badly-fed, badly-housed, and uncleanly, more than others.

Symptoms.—The two varieties have some features in common: the falling off of eyelashes, eyebrows, and whiskers, alteration of the voice, ulceration, distortion, mutilation, and (in the advanced stage) local insensibility to touch, and mental torpor. *Tubercular Leprosy* is characterised by tumefaction of the skin, in shining or bronzed dark-brown patches, chiefly on the face and extremities; these are often excessively tender at first; tubercles appear; the features become puffed out, irregular, and rugose, and assume a strange leonine expression; the lips thicken; the mucous membrane of the buccal cavity becomes affected by deposition of material; the internal glands are affected (except the pancreas); tubercles extend over the limbs; the sebaceous glands become enlarged, and are abnormally active; the body exhales a loathsome fœtor; the fingers and toes contract, become gangrenous, and the phalanges drop from ulcerated fissures about the articulations; the hand or foot may also be lost; and there is considerable constitutional disturbance throughout the progress of the disease.

Non-tubercular Leprosy is characterised by light discoloured patches, devoid of sensation, on the face, ears, and extremities; bullæ atrophy; distortion of the fingers and toes by contraction, which gives them the appearance of birds' claws; enlargement of the joints; mutilation by interstitial absorption rather than by ulcerative process; occasional circular ulceration of the extremities; little constitutional disturbance.

The duration of the *non-tubercular* variety is generally longer than that of the *tubercular*, for the intercurrent diseases—of which Constipation and Psoriasis are the most common—usually facilitate the advent of death more quickly in the latter form. In tubercular Leprosy, death may take place in nine years; in non-tubercular, it may be postponed for twenty years.

In both varieties, Leprosy is liable to be complicated with

other cutaneous eruptions, such as Psoriasis, Eczema, Scabies, Ichthyosis, and Elephantiasis Arabum.

Treatment.—*Arsenicum* is the principal remedy. It should be given in a low dilution for a long period.

Antimonium Crudum.—Foul-smelling, pus-secreting sores, gastric derangement.

Mercurius.—Syphilitic symptoms; coppery-hue of the skin under the scales. *Kali Hyd.* as an intercurrent remedy.

Hydrocotyle Asiatica.—This remedy is highly recommended, and is not only much valued as a native remedy, but its proving has confirmed its special action on the cutaneous structures. It is said to be useful in cases complicated by ulceration, Syphilis, and Scrofula. It is an excellent stomachic and tonic, and its use is followed by a general improvement of the health.

Aurum Met. is recommended by Dr. J. C. Burnett.

Cod-liver oil is also a valuable remedy.

Accessory Means.—Different oils are applied externally in India, which may have the effect of softening the skin, and lessening the annoyance produced by the eruptions.* Carbolic acid is condemned as injurious. Dr. Van Someren, of Madras, says: "Certain I am that until natives at large feed

* Dr. Dougall, the senior medical officer of Port Blair, Andaman Islands, reported the successful treatment of lepers with Garjun, or Wood Oil. It is well known in India as the product of the indigenous *Dipterocarpeæ*. The "Garjun ointment" is composed of one part of oil to three of lime-water, shaken violently together until they thoroughly amalgamate; the preparation for internal use is composed of equal parts of oil and lime-water. "It is not disagreeable to the palate, and although the lepers get half-ounce doses of the emulsion morning and night, they constantly ask for more." The dose is four drachms morning and night, at the time of external treatment. This consists in first applying the ointment, rubbing it in well for several hours; subsequently removing it, together with the ulcerous exudations, by covering the skin with finely-powdered dry earth (used as a detergent), and then washing it off in a stream; and, finally, renewing the ointment with prolonged friction. The ulcers of twenty-four lepers have thus been healed, and have in no case broken out again. Dr. Dougall believes that leprosy, both tubercular and anæsthetic, can be arrested by this remedy, and that it is through the constitutional effects that the tubercles soften from within outwards. The internal use of the oil improved the digestion, and stimulated the excretory functions. No change was made in the diet. No vesication was produced, no pain caused. Should Dr. Dougall's experience be confirmed, he will prove to be a great benefactor to the leper.

on better and more *nutritive food* than they do, they will continue liable to Leprosy; and that, also, when once leprous, good nourishing food is certainly the best means of keeping the manifestations of the taint at bay." Lepers should be provided with such employment as they are capable of, and with recreation and amusement in the open-air, to promote general health. Medicinal treatment is of little value without simple nutritive diet, pure air, suitable clothing, protection from changes of the weather, out-door exercise, and scrupulous personal cleanliness. The systematic use of baths is decidedly beneficial.

71.—Elephantiasis (*Elephantiasis Arabum*)—Barbadoes Leg.

Definition.—A hypertrophic growth of the cellular tissue, causing excessive thickening and change in the aspect of the skin, so that it becomes tawny, livid, hard, often scaly or fissured, and covered with warty protuberances.

It usually attacks the *legs* and *scrotum;* it also affects the belly, breast, pudendum, etc. It is almost exclusively confined to tropical countries; in the West Indies it is called the *Barbadoes Leg*, because that limb is generally affected; in Egypt, the *Egyptian Sarcocele* (*Elephantiasis Scroti*), because the scrotum is there the seat of disorder; and generally has received the designations of *Elephant Leg*, and *Bucnemia tropica*. It is important that some distinctive term be employed, that it may not be confounded with *Elephantiasis Græcorum*, or Leprosy.

The duration of the disease is variable; no class is exempt from it; it is not hereditary, nor is it contagious. Men are attacked more frequently than women.

Pathology.—The disease is due to a hypertrophic condition of the lymphatic glands, which are first inflamed, then obstructed, and therefore unable to remove the lymph; this infiltrates the cutis and subcutaneous cellular tissues, coagulates, and causes the characteristic symptoms. While the thickening and other changes in the skin are proceeding, the muscles waste, become pale, and pass into a state of fatty

degeneration, and the blood-vessels and nerves are enlarged, and the lymphatics are obliterated.

Symptoms.—The invasion of the disease is characterised by febrile symptoms, which soon subside ; they, however, recur at uncertain intervals. Meanwhile there is redness, pain, and tension, along the course of the lymphatic glands,—if the leg be affected, the crural and inguinal glands become enlarged and tender,—and though the inflammation decline, the enlargement remains. During the progress of the disease, the skin and subcutaneous tissues are thickened and swollen by the infiltration of lymph which has been secreted but not removed. This causes a peculiar change in the colour and condition of the skin, which becomes dark, hard, thick, often scaly and fissured, and covered with warty swellings. The veins also become varicose, also the lymphatics. The surface is then covered with vesicles located in the cutis and filled with lymph. These vesicles are really the dilated points of lymph vessels in a hypertrophic condition, and ultimately ulcerate, suppurate, and emit a foul discharge.

Treatment.—Hydrocotyle Asiatica, Arsenicum, Myriotica Sebifera, Ac.-Nit. (*syphilitic taint*). Firm, continuous bandages may be employed, and the general hygienic measures recommended in the Section on "Leprosy."

72.—Scrofula (*Struma*).

Definition.—A constitutional disease, marked by abnormal nutrition and production of cells, and the formation of weakly-organised tissues, and resulting either in the deposit of tubercle, or in specific forms of Inflammation or Ulceration. It appears generally as a morbid condition of the lymphatic glandular system, but there are few textures or organs free from the disease as an original idiopathic affection. It may arise at any age, but is much more frequently attendant upon rapid growth.

a. Scrofula with Tubercle (*Tuberculosis*).—It is at present uncertain whether Scrofula and Tuberculosis are different diseases or not ; but it is highly probable that the disease of

the blood which leads to the growth of tubercle, and that which gives the specific character of scrofulous affections, are identical.

Tubercles are about as large as millet-seeds, and are of two varieties—the *grey* and the *yellow:* the former is semi-transparent and somewhat firm; the latter of a dull yellow colour, and of a cheesy consistence. The yellow has in it far greater elements of danger: softening takes place earlier, and it has a greater tendency to aggregate in masses. Frequently the two varieties are mixed, but as cases advance towards a fatal termination, the yellow appears to gain the ascendency. Many pathologists are of opinion that the yellow is simply the grey tubercle in a state of caseous degeneration, and that an uncertain interval elapses before the degeneration occurs.

Tubercles are usually produced slowly and painlessly, during some period of defective health, and after remaining latent for an indefinite time, they waste, or calcify, if the general health improves, or soften and cause Abscesses and other destructive changes, if the health deteriorates. Unlike Cancer, tubercle has no elements of reproduction.

The practical conclusions of Laennec, Clark, Bennett, Pollock, and other scientific observers, are, that if the further growth of tubercle can be arrested, those already existing may diminish in size, become absorbed, and the parts cicatrise; or they may remain dormant, without exciting any symptoms, after undergoing a process called *cretification*, in which the animal portion is absorbed, the earthy only remaining. Frequently, however, from defective hygienic conditions, or other cause, tubercles undergo a succession of changes; they first become soft in the centre, that part being the oldest and most removed from living influences; then, like foreign bodies, they excite Inflammation, Suppuration, and Ulceration in the neighbouring tissue. The groups often continue to enlarge till several groups communicate and form a *vomica;* this bursts, and when the lungs are the organs involved, its contents are discharged into an adjacent bronchial tube, and the matter is conveyed into the windpipe, and thence to the mouth, to be evacuated. Unless the disease be arrested,

other Abscesses form and unite, till the lung-substance is so diminished in volume, and its continuity so completely destroyed, that the patient dies of exhaustion. In other cases, the tubercular matter, with the inflammatory products it excited, are removed by expectoration or absorption, the cavity is obliterated by contraction of the surrounding tissues, and so the disease is cured.

The parts most commonly affected by tubercle are—the *lungs*, the *brain and its membranes*, the *intestines*, the *liver*, the *pericardium*, and the *peritoneum*.

b. Scrofula without Tubercle (*King's Evil*) is usually manifested by various local lesions, the most common of which is induration and enlargement of the subcutaneous glands of the neck, below the jaws, in the axillæ, or groins, and less frequently in other parts of the body. These swellings are at first soft, painless, movable; afterwards, they may enlarge, become painful, inflame, and eventually suppurate, forming scrofulous Ulcers. They occur very frequently during childhood, and either remain for a long time inoperative, or proceed to inflammation and suppuration. In both forms of Scrofula, there is a deficiency of fibrine and hæmatine, with a lymphatic and albuminous distention of the vascular systems; but all enlargements of the lymphatic vessels and glands are not due to Scrofula; they may arise from temporary causes, and their character as such is readily determined by the history and symptoms present.

Other symptoms of Struma are:—Hydrocephalus, scrofulous Ophthalmia; Otorrhœa; Ozæna; a large and tumid abdomen; swellings and Caries of bones, White-swellings, and Hip-joint disease; diseases of the testicle and mammary gland; various cutaneous diseases; disordered Dentition, and infantile Convulsions; which are referred to in following Sections. Persons of a good constitution are often proof against diseases which accidents or adverse atmospheric influences readily develop in the strumous; but that the constitutional habit directly affects the mental capacities seems to be without foundation.

Causes.—The most important *predisposing* cause is *hereditary tendency*. But the following may be both *predisposing*

and *exciting causes*, and their power in the production of Struma cannot be over-rated:—

Want of pure air consequent on the imperfect ventilation of sitting and sleeping-rooms is a frequent and potent exciting cause of tubercular disease, as indeed might be inferred from the physiological evidence of the extreme importance of a proper aeration of the blood. Persons breathing, for a considerable period, air which has been rendered impure by respiration, soon become pale, partially lose their appetite, and gradually decline in strength and spirits. Defective aeration leads to imperfect nutrition of the blood; the general tone of the system sinks, and it can offer but a feeble resistance to morbific agencies. Of special diseases, Consumption is now known to be frequently induced by the constant breathing of air vitiated by the organic vapours and particles arising from the person. Evidences of this are very numerous. In a school at Norwood, containing 600 boys, scrofula was extremely prevalent, and great mortality occurred, which was supposed to be due to deficient or unwholesome food. The diet was, however, investigated, and found to be good, but the ventilation of the rooms and dormitories was very imperfect. This was corrected, and the disease rapidly disappeared. Even the cow, imprisoned in the town shed, the penned sheep, the confined monkey, the hutched rabbit, the caged lion, tiger, or elephant, almost invariably suffer from tubercular disease, the cause being defective ventilation and want of healthy exercise in a free atmosphere.

In *working-rooms*, a large majority of the industrious classes of this country are deprived of an adequate supply of fresh air to support physiological changes in their integrity. Even where a proper amount of air is admitted into the day-rooms, ventilation is often neglected in the *sleeping-rooms*, and eight or nine hours are spent in a place so limited, that the impure products of respiration, and the exhalations from the relaxed skin induce much of the Scrofula and Consumption prevalent among the working population. This respiration of impure air in work-rooms, dwelling-houses, schools, and in places of public assembly, directly lowers the vital powers, enfeebles the nervous system, diminishes the appetite, deranges the

secretions, and favours the retention of worn-out particles in the blood, which may act both as a predisposing and exciting cause of Consumption.

Unhealthy occupations rank among the predisposing causes of scrofulous diseases. But occupations are only incidentally injurious to health, the chief circumstances which render them so being mostly preventible; they are, briefly, the following:—deficiency of sunlight and pure air, the inhalation of mechanical or poisonous substances, too prolonged hours of work, a bad posture of the body during labour, and the intemperance, and consequent poverty, of those engaged in them. Out-door occupations are much less likely to produce scrofulous or tuberculous diseases than those practised in-doors.

A deficient supply or an improper quality of food may serve as an exciting cause, although probably to a less extent than the causes already indicated. Even the hand-feeding of infants, as too generally practised, may have a considerable share in the production of the cachexia.

Two other potent causes of Scrofula have been pointed out by Dr. Piddock; they are *tobacco-smoking* on the part of the father, and the existence of *leucorrhœal discharge* on that of the mother. To both of these we would draw special attention.

Indulgence in tobacco-smoking, more especially when the habit, acquired early in life, becomes frequent and inveterate, is, it is believed, a fruitful cause of Struma. The pale, sallow complexion, the frequently disordered digestive functions, and the debilitated or consumptive frames of many young fathers in the present day, attest the pernicious tendency of the habit in question.

Leucorrhœal, hæmorrhagic, or other uterine and vaginal discharges, often generate Scrofula in the fœtus, which declares itself during infancy in Convulsions, Hydrocephalus, Mesenteric disease, or, at or after puberty, by Tubercular Consumption. No observant medical man can doubt the influence of these causes as tending largely to the production of disease.

The scrofulous habit, therefore, even if not congenital, may probably be produced by any cause capable, directly or indirectly, of lowering the vital energies, such as acute specific

disease, especially Measles, Scarlet fever, Enteric fever, Small-pox, and Whooping Cough; poverty and wretchedness; meagre or insufficient food; neglect of healthy exercise; insufficient clothing; want of cleanliness; frequent exposure to cold and damp; and, especially, want of pure air and sunlight.

Treatment.—The perfection of the treatment of Scrofula and tubercle, as, indeed, of disease in general, lies in its adaptation to individual cases. The stock whence the patient has sprung, the circumstances of birth and early life, education and general habits, the influences of soil and climate, the diseases passed through, the tendency to disease of the body generally, and of organs and tissues in particular,—this is but an enumeration of the points that have to be brought under consideration before a course of treatment can be prudently decided upon. This is generally tedious, often requiring to be continued for months, or even for years. The leading characteristics are: (1) to improve the faulty nutrition; (2) to subdue the febrile symptoms and promote the absorption of the tubercles; (3) to arrest the formation of tubercles by medical and hygienic measures during the intervals of improved health.

a. The Struma.—A dose of one of the following medicines may be given once or twice daily, as it exerts a favourable influence over the cachexia. As it is often desirable to persevere with one remedy for a long period, it is necessary occasionally to suspend its use for a few days, then to administer a dose or two of an intercurrent medicine, such as *Sulphur;* and again, after waiting a few days, to resume the former remedy. The most useful remedies are,—*Calc. Sulph.*, *Iod.*, *Ferr.*, *Phos.*, *Ars.*, and *Merc.*

Calcarea—Is well adapted to those constitutions in which the digestion and assimilation of food does not lead to the formation of good blood and healthy tissues; there is an *impoverished*, or, on the other hand, a *stout, soft,* and *pale appearance,* notwithstanding that a sufficient supply of good food is taken. It is indicated in the cases of *enlarged and hard abdomen,* so frequently met with in children with a tuberculous tendency. Other indications for this remedy are,—a want of firmness of the bones, slow or difficult

dentition, frequent discharge from the nose, profuse lachrymation, everted eyelids, intolerance of light, scrofulous swellings, extreme sensitiveness to cold and damp, and, in females, too frequent and profuse period.

Sulphur.—Unhealthy skin; Scrofulous Ophthalmia of children; humid eruptions behind, or purulent discharge from, the ears; swelling of the axillary glands, tonsils, nose, or upper lip; swelling of the knee, hip, or other joints; defective nutrition; colicky pains, mucous discharges, etc.

Mercurius Biniod.—Enlarged glands; hard abdomen; eruptions on the head, face, and ears. The latter symptoms may also require *Iris.*

Phosphorus.—Frequently and easily disordered lungs, with a *short, dry cough,* pain or soreness of the chest, shortness of breath, tendency to *diarrhœa* or *perspiration,* and general feebleness of constitution.

Arsenicum.—This is one of the most important remedial agents in Scrofula, when *debility* is very marked, and the patient has frequent and exhausting discharge from the bowels, sallow complexion, and *emaciation. Merc.-Iod.* and *Silicea* are often suitable adjuncts.

Ferr.-Iod.—Is of great value in the *anæmic,* impoverished, and cachectic condition so common in Scrofula and Tuberculosis, arising from *imperfect assimilation* of food.

Aurum.—Chiefly indicated in *affections of the bones;* Ozæna; and in cases improperly dosed with *Mercury. Ferrum* and *China* are deserving of attention in like cases.

Belladonna.—When sensitive organs are affected, such as the eye, the ear, and the throat, with heat, redness, and *pain in the eye,* and great *intolerance of light;* neuralgic pains; sore throat, rendering swallowing difficult; painful swelling of the parotid and other glands; *convulsions* of children; acute Hydrocephalus, etc.

Silicea.—Scrofulous ulcers with callous edges, fistulous ulcers, *Scald-head, Otorrhœa;* scrofulous affections of the bones. It may follow *Calc.*, especially in disease of the bones.

Mercurius.—Glandular inflammations, particularly in the neck, with much swelling, redness, and pains worse at night

in bed, combined with strumous affections of the eyes; *Otorrhœa;* abscesses; *copious saliva;* disagreeable taste, and frequent fœtid and *unhealthy-looking stools.*

Sepia.—Females, with menstrual irregularities, corrosive *Leucorrhœa,* indurations of the uterus, unclear skin, etc.

Iodine.—Enlargement of the glands; scrofulous inflammation of the knee; rough, dry skin; enlarged mesenteric glands, and tender abdomen; emaciated appearance, with hectic; much mucous discharge from the nose. A *chronic diarrhœa,* premonitory of consumption of the bowels, is well met by this remedy.

Phyto., K.-Hyd., Bary.-Carb., Hep.-S., Staph., Spong., or other remedies may be required.

b. The Indigestion.—In order to correct the derangements of the digestive tract—which have an important bearing on the development of the tubercular predisposition—choice may be made from the following short list of remedies:—

Nux Vomica.—Indigestion with *flatulence,* heartburn, acid eructations, and Constipation or *irregular action of the bowels.* It is specially indicated in patients of dark complexion, sallow skin, of sedentary habits, or who suffer much from mental fatigue or anxiety.

Pulsatilla.—Adapted to that form of Indigestion in which fat, an important constituent of a mixed diet, is distasteful, or not taken without *derangement of the mucous membranes. Puls.* is generally more suitable for light-complexioned persons, and where there exists a tendency to *diarrhœa* rather than to constipation from gastric disturbance; otherwise the indications are much the same as for *Nux V.*

Calcarea Carb.—In addition to the indications before pointed out, this remedy is useful in *obstinate acid eructations* not cured by *Nux V.* or *Puls.,* and when a debilitating relaxation of the bowels is present.

Mercurius.—Faulty action of the liver, shown in *yellowish skin* and *conjunctivæ,* mental depression, anorexia, etc.

K.-Bich., Bry., Ant.-C., or *Carbo Veg.,* may likewise be of service in some cases. See the Section on "Dyspepsia."

Accessory Means.—These are of the *greatest* importance,

for medicines will be of little use unless hygienic rules are strictly observed.

Air.—Pure, fresh air is required night and day. There is more risk to health in staying indoors than in going out. A bracing mountain- or sea-air, if it can be borne, is the best. Scrofulous residents are rarely found near the sea-side. A uniform, sheltered, temperate (about 60°, with variation of 10° or 15°) climate, with dry soil and pure, soft water, should be preferred. Protection from cold and sudden changes of the temperature should be attended to. The temperature of the rooms should be about 55°, warmth and ventilation being secured by open fireplaces. The larger the sleeping-room the better ; its windows should be open all day.

Exercise.—Moderate exercise in the open-air is most essential ; and in carrying out this suggestion the patient should endeavour to take exercise cheerfully, rather than as an irksome task. Moderate gymnastic exercises are beneficial ; but exercise of any kind which causes profuse perspiration is injurious.

Food.—The food of scrofulous patients should always be of the most nutritious character, light and digestible. Beef, mutton, venison, and fowls, are the best kind of animal food ; to these should be added preparations of eggs and milk, a due quantity of bread, mealy potatoes, rice, and other farinaceous principles, as more suited to this class of patients than very watery and succulent vegetables. Everything that favours the production of acidity ; too much fruit ; very salt, sweet, fat, or highly-seasoned food, should be avoided.

Cod-liver oil, as a supplemental article of diet, is an agent possessing such remarkable and well-known properties of arresting general or local emaciation as not to require further recommendation here. It may be given in any case in which there is wasting without acute febrile symptoms, in teaspoonful doses, two or three times a day, commencing even with half a teaspoonful, if it be found at first to disagree. The above, or olive-oil, may also, with great advantage, be administered by inunction.

Bathing, both in fresh and salt water, is invaluable, as a means of promoting a healthy action of the skin, and of im-

parting tone to the whole system. *Tidman's sea-salt* should be used when salt water cannot be obtained.

Clothing should be adapted to the season, and should be warm without being oppressive. The extremities especially should be kept warm. As a general rule, flannel should be worn, but only during the day; in winter it affords direct warmth, and in summer it tends to neutralise the effects of sudden changes of temperature. The linen should be frequently changed, and always put on perfectly *dry*. Waterproofs of all kinds are to be condemned.

Prevention.—The prevention of strumous diseases consists less in the hygienic or medical treatment of patients, than in correcting the habits and improving the health of parents, more particularly in respect to the points referred to under "Causes," p. 297.

73.—Tubercular Meningitis (*Meningitis tuberculosa*)—Acute Hydrocephalus.

Definition.—An inflammatory condition of the membranes of the brain, associated with miliary tuberculous growths, and serous effusion between the membranes, or into the ventricles. It generally occurs in families some members of which have suffered from Scrofula or Consumption.

Symptoms.—When occurring in children, the usual manifestations of the disease are,—febrile disturbance; quick, irregular pulse; vomiting; Constipation; the motions having the appearance of clay; red tongue; and continuous high temperature. The child is irritable; has disturbed sleep; grinds his teeth; manifests pain in the head, intolerance of light and noise; is unable to stand from *Vertigo;* and becomes generally feeble. He also desires to be quiet; is occasionally delirious; looks old and distressed; suddenly cries out; and is very drowsy. Twitching and squinting may also occur. In unfavourable cases, coldness of the extremities, clammy perspiration, an exceedingly rapid and feeble pulse, and death supervene.

Treatment.—*Aconitum* at first, for the febrile symptoms.

Belladonna.—Brain-symptoms, as above described.

Hyoscyamus.—Drowsiness and stupor, with occasional *fits of excitement*, starting, picking with the fingers.

Bryonia.—When *effusion* on the brain is probable.

Helleborus.—If there be *much* effusion.

Zincum.—Incipient *Paralysis of the brain.*

Sulphur, as an occasional remedy.

Cuprum Aceticum.—Intensified symptoms; darting the tongue in and out.

Apis, Dig., Ver.-Vir., Ars., Apoc., Staph., Glon., and Iod. may also be required.

"*Arn.* (cerebral, when caused by a blow); *Ac.-Oxal.* (spinal, stiffness and paralysis of the lower limbs); *Cicuta Virosa* (cerebro-spinal, with symptoms of blood poisoning); *Crot.* (when other remedies fail to relieve spasms); *Act.-R.* (during spasms); *Gels.* (after effects: paralysis); (1) *Silic.* (2) *Sulph.* (deafness)."—*J. H. Clarke.*

Accessory Treatment.—This should include applications of cold water to the head, liquid diet, sponging the body with cold or tepid water, followed by quick perfect drying, and *strict quietude.*

74.—Scrofulous Ophthalmia (*Ophthalmia strumosa*).

Definition.—Inflammation of the conjunctiva—the mucous membrane which lines the inner surface of the eyelids and the front part of the globe of the eye—occurring in young persons advancing towards puberty, and in children of scrofulous constitution, living chiefly in low, badly-drained situations.

Symptoms.—The three prominent symptoms are,—extreme *intolerance of light*, so that the child persistently holds its head down, and only opens its eyes with the greatest difficulty; *spasmodic contraction of the obicularis palpebrarum muscle*, causing eversion of the eyelids, and a *profuse flow of tears*, often excoriating the cheeks or covering them with an itching eruption. But when, at length, the eyes are opened, there is nothing to be seen at all commensurate with that dread of light which the patient manifests, for it is more a nervous than a vascular disease. These symptoms are generally accompanied by others which mark the scrofulous constitution

—enlargement of the absorbent glands about the neck, sore ears, a large abdomen, etc.

Causes.—As stated, the *predisposing* cause is a strumous habit; the *exciting* causes are, exposure to bright light, cold, irritating vapours, neglect of cleanliness, etc.

Epitome of Treatment.—

1. *For the inflammatory symptoms.*—Merc.-Cor., Bell., Coni., Euphr., Ac.-Phos., Hep.-S., Ars., K.-Bich.

2. *For the constitutional condition.*—Calc.-C., Sulph.

Leading Indications.—

Mercurius Cor.—Severe acute attacks, with *extreme intolerance of light.* In the 2x dil., administered early, it often cuts the disease short.

Belladonna.—In less severe forms of the disease than that for which Merc.-Cor. is prescribed; first inflammatory period.

Euphrasia.—Profuse discharge of tears. It is most useful at the commencement of the disease, but requires to be followed by some deeper-acting constitutional remedy.

Arsenicum.—Extremely obstinate cases, in which other remedies have been unsuccessful; excessive irritation of the lachrymal ducts.

*Sulphur.**—Chiefly valuable in the Ophthalmia of *unhealthy, strumous* patients, but often useful in every kind of Inflammation affecting the various tissues of the eye.

Calcarea Carb.—Inflammation of the eyes, with *swelling of the glands*, and other marks of the scrofulous constitution.

Accessory Means.—As a lotion, Calendula 5 drops to one ounce of water, or warm water, or tepid milk-and-water, should be frequently applied during the acute stage. Much comfort may also be derived from holding the eyes over the vapour from hot water. The eyes should be protected by a shade. Wholesome nourishing food, including cod-liver oil, and pure country- or sea-air, are essential.

* Dr. D. Dyce Brown remarks: "In strumous Ophthalmia, I find no medicine so generally valuable as *Sulph.* I always begin with this, and it is often sufficient to complete the cure. One case had been under the best allopathic treatment for six months with no improvement. I gave *Sulph.* 3, ter die, and in a week the child came with its mother, walking in briskly, and facing the light with eyes wide open, though before commencing the treatment, nothing could induce the child to open its eyes, except in a very dark room."

75.—Scrofulous Disease of Glands (*Morbus Strumosus Glandularum*).

Definition.—These terms include all those affections of the lymphatic glands—enlargement, induration, and suppuration—which arise from the scrofulous cachexia.

Symptoms.—The gland slowly enlarges, becomes hard, and is painless up to a certain point; afterwards Inflammation, pain, and suppuration occur, the pus being curdy and ill-conditioned, probably from the growth of tubercular matter; and when the wound is healed, a marked and, frequently, protuberant cicatrix remains. In other cases, however, the gland remains enlarged, without proceeding to suppuration. The glands most commonly affected are those in the neck, under the jaw, the axillary, and the inguinal. The disease is usually confined to children and young persons.

Epitome of Treatment.—

1. *Acute inflammatory symptoms.*—Bell., Hep.-S., Acon. Also wet compress, poultice, fomentation, etc.

2. *Chronic enlargement.*—Iod., Merc.-Iod., K.-Hyd., Ammon.-Mur. (*indurated*), Phyto., Calc.-Iod., Silic., Sulph. Other recent authorities recommend Arum.-Triph. (*sub-maxillary glands*), Ars. (*thin, weakly subjects*); or Baryta C. or Cistus C. locally. Kali-Iod. lotion, as a compress one grain to the ounce. Nourishing diet, cod-liver oil, pure air, sunlight, with the general treatment prescribed for "Scrofula."

76.—Phthisis Pulmonalis (*Phthisis Pulmonalis*)—Pulmonary Consumption.*

Definition.—The word Phthisis (from $\phi\theta\tilde{\iota}\omega$, to consume) expresses a disease specially marked by general emaciation, usually coincident with the growth of tubercles or grain-like bodies in the lungs, and often, but not necessarily, fatal. The terms Tubercular disease, or Tuberculosis, and Phthisis are synonymous.

* See the Author's work on "Consumption and Tuberculosis of the Lungs: their Diagnosis, Causes, and Preventive and General Treatment."

The nature of *tubercle* is stated in the Section on "Scrofula." The frequent development of the tuberculous cachexia in the lungs is probably owing to the great vascularity of these organs, their loose and spongy texture, and their ceaseless movements.

Consumption with tubercles indicates a deeper constitutional cachexia than the non-tubercular form, and is most common in scrofulous families, in which glandular enlargements, scrofulous Ophthalmia, Tabes Mesenterica, Hydrocephalus, or hereditary Phthisis, prevail.

In the non-tubercular form, morbid deposits in the lungs—as blood-clots from hæmorrhage, or the exudations of Pneumonia, etc.—undergo caseous degeneration, causing an ulcerative destruction of the lungs. This is the commoner and more curable form.

Differential Diagnosis of Tubercular and Non-Tubercular Phthisis.

TUBERCULAR.	NON-TUBERCULAR.
1. The first symptom is a dry short cough.	1. First stage follows Catarrh, Bronchitis, Hæmoptysis, or some other *acute* disease.
2. *No exciting* cause apparent.	2. Is traceable to *some exciting* cause, as cold, inflammation, or the inhaling of *heavy* dust.
3. Hereditary cases are of this class almost invariably.	3. Not hereditary.
4. Frequently preceded by enlarged or suppurating glands or other evidence of scrofula.	4. No evidence of scrofula.
5. The voice is peculiar from tubercular deposit on the vocal cords or larynx.	5. No change of voice.
6. In the early stage, the shortness of breath is greater, and the pulse and temperature are higher, than the local signs would indicate.	6 An examination of the chest reveals signs proportionate to the shortness of breath, and the rise in the pulse and the temperature.

Symptoms.—In tubercular Consumption, the early indications are often obscure, and may appear at any age, but most frequently between twenty and thirty. The chief symptoms

are *impaired digestion*—loss of appetite, red or furred tongue, thirst, nausea, vomiting, and, in rare cases, Gastralgia; more or less *cough*, chiefly in the morning; hoarseness or weakness of voice; irregular *pains in the chest; dyspnœa* on slight exertion; *debility*, languor and palpitation; persistently *accelerated pulse; heightened temperature; night sweats;* and *progressive emaciation.*

When a convalescent from acute disease—as Pneumonia, Enteric fever, Measles, etc.—ceases to progress without suffering a positive relapse, the non-tubercular form is to be feared, particularly if the patient be of a feeble constitution, or greatly reduced by disease. Increased frequency in breathing, slight cough, with or without yellow-streaked sputa, and an abnormally high temperature, are first noticed, the above symptoms being gradually superadded.

The gums should be examined to detect a red line next the teeth, and the nails to observe if they are curved downwards at their ends (*filbert nails*); for both these are common in Phthisis. The latter symptom, however, being a frequent accompaniment of emaciation, affords no proof of the existence of tubercles. With the loss of flesh, the nails naturally assume the rounded shape of the bones on which they almost immediately rest, and are found to vary according to the patient's state of nutrition, recovering their normal shape when the cause of the change ceases to exist. Inquiry should also be made if any members of the patient's family have died from Consumption.

Cough is a prominent symptom. In the early stage, it is dry, short, irritative, most troublesome in the morning, or after exertion, and may continue for months without aggravation or the supervention of any other symptom; the expectoration is usually small in quantity, and consists of ropy or glairy mucus. In a more advanced stage, when tubercle softens, or Bronchitis is present, the cough becomes moist and more prolonged, recurring during the day, especially after slight exertion, from the necessity for getting rid of the inflammatory products and disintegrated lung tissue, which then begin to accumulate. The recognition of this different variety of cough is necessary in order to prescribe for its cure and relief, as remedies suited

to one condition are inadmissible in the other. The mere existence of a cough *per se*, by no means proves that Consumption is present, as it may arise from diseases of other organs than the lungs; neither does the absence of cough prove the non-existence of the disease.

Hæmoptysis frequently, but not invariably, occurs; it is a suspicious symptom, and often gives the patient the first intimation of danger; its occurrence, either before or soon after the commencement of a cough, always renders Consumption probable, especially if the patient has received no injury of the chest, or has no disease of the heart, or of the uterine system. "But in the very great majority of cases," writes Niemeyer, "in which the first attack of Hæmoptysis has not been preceded by cough, dyspnœa, or other symptoms of pulmonary disorder, the lungs are free, and by no means the seat of tubercular deposit, at the commencement of the bleeding." The same author further remarks "that bronchial hæmorrhage is by no means a rare event where there is no grave disease of the lungs, is shown, moreover, by the tolerably numerous cases in which persons, after suffering one or more attacks of pneumorrhagia, regain their health completely, and, indeed, often live to an advanced age, and after death present no discoverable traces of extinct Tuberculosis in the lungs."

In phthisical Hæmoptysis, the amount of blood discharged is sometimes very small in the early stage, merely streaking the sputa, or there may be a few teaspoonfuls, proceeding only from the small vessels that are congested in the neighbourhood of the tubercles; but, in the latter stages, there is sometimes a copious and even fatal Hæmoptysis, arising from some large vessel being opened by ulceration and rupture of an artery in a *vomica;* but this is comparatively rare, because the vessels usually become plugged with coagula before the ulceration opens them.

A *persistent rapidity of the pulse,* ranging from 90 to 120, or higher, is an invariable symptom of active Phthisis. The pulse is especially liable to become accelerated towards evening, and, as the disease advances, becomes more rapid and also feebler. "The nervous system has the heart for its gnomon or clock-dial; and extreme rapidity of the heart's

action, while it has a most grave import in acute disease, is also an accurate measure of the failure of nervous power in chronic affections. It is rarely under 100, and may run up from this to 140, or till it is impossible to be reckoned; and there is no more disastrous symptom" (*Pollock*).

Shortness of breath or *difficult breathing* is a common early symptom. In Phthisis, the capacity of the lungs is diminished, and enough air is not inspired to aerate the blood sent there by the quickened action of the heart. An extensive growth of tubercle in the lungs gives rise to very great distress in breathing; this symptom becomes, therefore, a sign of the extent of the deposit. This is confirmed by the use of the Spirometer. The number of respirations in healthy, tranquil breathing, is 14 to 18 per minute, and bears a remarkable proportion to the pulsations of the heart; that is, one complete respiration to about every five beats of the heart. In Phthisis, the number of respirations is from 24 to 28, the number increasing as the disease progresses. Inspiration is generally short, limited, and speedily checked, causing uneasiness or inducing coughing, and is quickly succeeded by expiration. The patient complains of want of breath; exercise, especially going up-hill or up-stairs, or walking fast, exhausts him, and he often requires to rest. The patient's *feelings*, however, cannot be relied upon as revealing the actual condition of the lungs, for the *sense* of dyspnœa may be experienced when the function of respiration is unimpaired, and, on the other hand, one lung may have become useless by slow compression without any such difficulty in breathing; his feelings more frequently indicate the rate of progress than the actual advance of the disease. A lowered respiratory power tends of itself to induce accumulations of mucus in the air-cells, and to excite inflammatory action.

Emaciation, one of the earliest symptoms, extends to nearly every tissue of the body—the adipose, the muscular, and the bony; even the intestines and the skin become thinner; it often proceeds uniformly from the commencement to the termination, and appears to bear a closer connection with the constitutional, than with the local, affection. Though liable to be increased by extensive disease of the lungs, intestines,

and mesenteric glands, and by hectic fever, still, in the absence of these conditions in their ordinarily intense form *wasting* goes on to the fatal termination, the patient sustaining a total loss of from one-third to one-half of his entire weight. *Slow and gradual emaciation*—"the grain-by-grain decay"—is far more indicative of Phthisis than a rapid or irregular diminution of weight; and emaciation is more dangerous, and naturally more marked, in individuals who have been previously stout. To detect the continuously progressive emaciation it is necessary to have patients accurately *weighed* from time to time. By this means a physician is also able to judge of the proportion between the weight of a patient and his height, age, breathing, and other functions.

Hectic fever, at length, makes its appearance, and its coincidence with the symptoms already mentioned confirms our diagnosis of Consumption. The patient is feverish and flushed in the evening, and in the morning is found drenched with perspiration. The pulse is small and weak, uniformly too high, but especially accelerated towards evening, reaching 120 beats in the minute, or more; "the beat being performed with a jerk, as if the result of irritation upon a weakened heart." The bowels are relaxed, especially in advanced stages of the disease, the diarrhœa aggravating the effects of the sweating, and augmenting the exhaustion; the tongue is furred white or brown in the centre, but unnaturally red around the tip and edges, and, immediately preceding the final break-up, is covered with the eruption of Thrush. The urine deposits red brickdust or pink sediment, consisting of the urates of soda and ammonia; the skin is clammy, except during the evening exacerbation, when it is burning hot; the complexion is clear, the eyes are bright and sparkling, and there is marked emaciation, especially as death approaches.

Finally, all the symptoms are gradually intensified: the dyspnœa becomes *very distressing*, so that the patient is unable to make any active exertion, or even to read a short paragraph without pausing; the sputa is more purulent; the pus is often expectorated pure, in roundish masses, that remain distinct in the vessel; the disease often spreads to other organs, as the lymphatic system and the intestinal canal, in which a

similar deposit of tubercle takes place, which afterwards bursts into the intestines, leaving an ulcer; and thus the entire alimentary canal is affected, and diarrhœa produced. The respiratory mucous membrane may also be ulcerated, and from the thickening and increase in vascularity which it undergoes, produces huskiness, and even loss of voice, but more frequently the former. *Aphthæ* of the mouth, pharynx, etc., or œdema of the lower extremities, may ensue. It is therefore but seldom that the local affection of the lungs alone causes death.

The mind usually remains bright, often vigorous, and so hopeful that, even amidst this general wreck of the material frame, the patient has no dread of the future, and thinks he "would be well but for his cough;" towards the end, however, slight delirium sometimes occurs, from circulation of venous blood in the brain, or a deposit of tubercles in its membranes.

The most characteristic symptoms are:—*undue shortness of breath* after exercise; *cough;* excessive *sensitiveness to cold air; spitting of blood; progressive emaciation; heightened temperature; rapid pulse; Hectic, Diarrhœa,* and *Aphthæ.*

Physical Signs and their Methods of Detection.—Notwithstanding the comparative conclusiveness of symptoms, it is unwise to rely on them alone when we can command the aid of additional evidence. In consequence of the frequent obscurity that surrounds symptoms, and the possibility that they admit of explanation in causes distinct from Phthisis, a physical examination is necessary to remove all uncertainty; and this examination, if conducted with care, and with the aid of natural science, renders the diagnosis of this disease almost as clear as if the morbid processes beneath the chest-walls were exposed to view.

The following are the methods of physical examination:—*Inspection,* or ocular observance of the form, size, and movements of the bared chest; *Mensuration,* by which the comparative volume of the two sides of the chest, and also the degree of expansion and retraction during respiration, are determined by measurement; *Percussion,* or tapping the chest, to ascertain the relative degree of dulness or resonance; *Auscultation,* or listening over the chest, to discover the condition of the respi-

ratory murmurs, either with or without a stethoscope; and *Palpation*, or examination by the hand, not included in Percussion, by which the vibration of the voice in both lungs may be compared, and the presence of fluid detected; but this is valuable only as a comparative sign. In conducting these varied methods, attention should be paid to the posture of the patient, and the chest freely uncovered, or little will be learnt. The tone and ring of the voice should also be carefully noted: in non-tubercular cases the voice is often unaltered. *Thermometry* indicates the temperature of the patient apart from his own sensations; and *Spirometry* tests the capacity of the lungs by means of an instrument constructed for the purpose. The *weight* and *height* of the patient are also considered in connection with his age and the revelations of the spirometer.

Temperature.—The value of the thermometer in the diagnosis of Phthisis, will be recognised by the fact that during the growth of tubercle in the lungs, or in any organ of the body, the temperature of the patient is always raised from 98° Fahr., the normal temperature, to 102° or 103°, or even 104°; the temperature increasing in proportion to the rapidity of tubercular growth. This sign may be occasionally detected several weeks before reduced weight or other symptoms indicate the undoubted existence of tubercle; and, in the absence of other signs peculiar to the disease, will determine the diagnosis of Consumption from *Chlorosis, or heart-disease.*

Causes.—The causes are similar to those of Scrofula; the most potent being *hereditary taint, dampness of soil, contagion,* and the *lowered vitality* caused by *impure air, deficient quantity* or *quality of food,* insufficient exercise, and *imperfect assimilation;* and so long as misery and poverty exist, or the unhealthy conditions and arrangements of indoor industry remain, or dissipation and enervating luxuries are prevalent, so long will the causes be in operation which induce this terrible disease.

Pneumonia, Acute Bronchitis, Measles, and other Exanthemata, Whooping-Cough, Syphilis, Pulmonary Hæmorrhage, Pleuritic effusions, etc., are the exciting causes of the non-tubercular form.

Progress.—In many cases, the progress of the disease is liable to various interruptions and pauses, during which all symptoms are ameliorated or even absent. If full advantage be taken of such pauses, they may often be employed for permanently arresting the disease. As before intimated, a large proportion of cases find their true starting-point in a catarrhal Pneumonia. When this disease becomes chronic, it may pass by imperceptible degrees to the true first stage of Phthisis. Catarrhal Pneumonia is in turn induced by a variety of causes. Thus it may be due to the plugging of a bronchus in capillary Bronchitis, the extensions of bronchial catarrh to the alveoli, impaction of a blood-clot in the air-cells after Hæmoptysis, hyperæmia of the lungs from over-exertion, or the irritation of foreign bodies in the bronchioles, as the dust from coal, stone, iron, and particles of other heavy substances. At this stage, the lobules are blocked up with secretion, which presses upon and devitalises the lung-substance, whence caseation, or fatty degeneration, results. The consequent softening marks the second stage, and the establishment of a vomica or cavity in the lung, the third. The vomica may *cicatrise*, and be obliterated by contraction of the tissues, in which case the disease is cured; or the destructive process may extend its ravages so far in the lungs that life becomes an impossibility.

In tubercular consumption, the initial stage is a deposition of tubercles, first on the mucous-membranes of the bronchi, and afterwards in the substance of the lungs. These deposits either become absorbed, or they undergo cretification, and are thus rendered innocuous, or caseation ensues, and the same course is followed as in the preceding variety.

Duration.—The average may be said to be from nine months to two years; but, in acute cases, the disintegration of the lungs proceeds with marvellous rapidity, and may prove fatal in two or three months, or even in as many weeks. An irritable mucous membrane—indicated by loss of appetite, furred tongue, diarrhœa, etc.—will hurry the disease through its stages; while a healthy digestive apparatus may prolong the stages indefinitely. Other circumstances must also be considered—age, amount of hereditary influence, hæmoptysis,

fever, &c. Age greatly influences the progress of Phthisis, the acute being most common in the young, and the chronic in the aged. The type of disease transmitted also greatly influences the duration.

Treatment.—It is of the utmost importance that so grave a disease should be brought under the influence of hygienic and medicinal treatment as early as possible, and before the strength is exhausted, or the lungs are disorganised throughout. Each case must be treated according to the individual nature and extent of the local and constitutional disease, for every patient is a separate volume to be constantly studied, so that the medicine may be always in correspondence with each new and special phase of the disease. On the part of the physician, constant watchfulness is essential. On the part of the patient, there must be the utmost promptitude and perseverance in the improvement of every advantage which circumstances may afford, and in attention to the remedial measures which may be prescribed. Scarcely less important is careful and judicious nursing. We repeat, every auxiliary must be brought to the front in the contest with this disease, for it is subtle, tenacious, and lethal.

Epitome of Treatment.—

1. *Cachexiæ.—Tubercular.*—Iod., Calc.-C., Nux Jug., Merc.-Iod., K. Hyd. *Non-Tubercular.*—Phos., Calc.-Phos., Ferr., Hep., Sang., Ars.-Iod., Calc.-Iod., Ant.-T.

2. *Indigestion.*—Puls., Nux V., Calc., Lyc., Merc., K.-Bich., Ant.-C., Carbo Veg., Ars.

3. *Cough,* etc.—Phos., Bell., Hyos. (*nightly dry cough*); Bry. (*stitching pains in the side*); Stann. (*profuse expectoration* and *night-sweats*); Ant.-T., K.-Bich.

4. *Hæmoptysis.*—Ham., Ipec., Dros., Arn., Sabi., Morph., Mill., Led., Ferr., Nux Mosch., Calc.-Ars.; Gallic Acid 1x grs. ij.

5. *Dyspnœa.*—Ars., Ant.-T., Nit-Strych.

6. *Hectic-fever, Night-sweats, Diarrhœa,* etc.—Ac.-Phos., China, Hep.-S., Samb., Stann.

7. *Various Symptoms.* — Kreas. (*sympathetic vomiting*); Phyto., K.-Hyd., K.-Bich., K.-Carb., Calc., Spig., Ac.-

Sulph., Merc.-Cor.; Chlorodyne* (*as a palliative in hopeless cases*).

Leading Indications.—

Calc.-Carb.—Imperfect digestion and assimilation; obstinate acid eructations; relaxed bowels; enlarged glands; sensitiveness to cold and damp; fatigue after slight exertion; cough; gradual emaciation; and, in females, *too frequent and profuse menstruation*, or Leucorrhœa.

Phosphorus.—Confirmed, as well as incipient Consumption, especially in girls of a delicate constitution; *dry, short cough*, so constant as to lead to exhaustion of strength; or moist cough, with greenish fœtid expectoration from an abscess in the lungs; *dyspnœa;* easily-excited *diarrhœa, or perspiration;* emaciation; pain and soreness of the chest; loss of appetite; dry or hot skin; small, quick pulse; etc.

Iodium.—Consumption associated with glandular affections —enlargement or atrophy—and diarrhœa from *Mesenteric disease.* Wasting from mal-nutrition, inability to digest fat food or milk, and the presence of *laryngeal or tracheal symptoms*, strongly indicate this remedy. Dr. Nankivell especially recommends it to be taken in Cod-liver oil; five or ten drops of the 1x tincture to a pint of oil.

Ferrum.—Anæmia, diarrhœa, œdema of the lower extremities, emaciation. *Ferr.* is required in most cases, for the constitutional condition, and also for *Hæmoptysis.* The 1x trit. or the *Tincture Ferri Perchlor.* may be used. The *Ferrum Acet.* is most suitable when the hæmorrhage is laryngeal or tracheal, with frequent tickling cough.

* The prescription in the text may appear unorthodox; but our first consideration is the welfare of the patient, and when a case has reached a point at which all *curative* measures are futile, and the end is not far off, palliatives are sometimes of priceless value. Some years ago we were requested by a medical man who was leaving the town to take charge of a consumptive patient for a few days, a week having been considered the longest time that any attention would be required. But by small doses of Chlorodyne, given at first once, and afterwards twice daily, the patient's life was prolonged thirteen weeks in much comparative personal comfort, and to the inexpressible joy of the family. Pain was assuaged, diarrhœa controlled, sleep procured, and many discomforts were relieved by means of this anodyne. Our experience, in this and many other cases, therefore, enables us to assert that Chlorodyne or other palliatives, given with caution and judgment, will be found to afford much alleviation in hopeless cases.

Calc.-Ars.—Slight hæmoptysis every two or three weeks, from a vomica, followed by scanty purulent expectoration. Suitable for plump but pale patients.

Antimonium Tart.—Profuse purulent secretion, with great distress from dyspnœa.

Kali Bichromicum.—Irritation of the throat low down, with much *tough, gluey, yellowish expectoration*, hawking or even sickness; also profuse sweating.

Bryonia.—Tearing dry cough, as if the chest or the head would burst by the effort; stitching pains in the sides, catching the breath (pleuritic); dyspnœa.

Pulsatilla.—This drug is adapted to that form of Indigestion in which *fat*, an important constituent of a mixed diet, is distasteful; and is not taken without more or less derangement of the mucous membranes. By the aid of this remedy, cod-liver oil, and other varieties of fat, may often be taken and digested, and amelioration of the symptoms follows.

Lycopodium.—Useful if the chest-symptoms are associated with chronic Indigestion—intestinal flatulence, constipation, etc. Especially called for in the first stage of catarrhal Phthisis, with symptoms of Pneumonia, or deep-seated Bronchitis, or with extreme moist râles.

Hyoscyamus.—Night-cough, especially when the cough commences or is aggravated on lying down.

Drosera.—Severe *paroxysms* of cough, causing frequent discharges of blood.

Arsenicum.—Tightness of the chest; oppressed breathing, *especially when recumbent;* chilliness in the chest; or soreness and burning from coughing; *exhausting diarrhœa; rapid emaciation;* depression of spirits. *Ars.* is a valuable medicine in nearly all stages of the disease, and especially in the last.

Hepar Sulph.—For scrofulous young persons, in the early stage. The chief symptoms are,—hoarse, rough, or weak voice, hollow cough, accompanied by expectoration of mucus, sometimes of blood; dyspnœa, especially on lying down; night-sweats; *pain after eating the smallest quantity of food;* clay-coloured or greenish evacuations.

Sulphur.—Valuable for the *constitutional* condition; also as an *intercurrent remedy* throughout the disease.

Aconitum.—This is a prominent remedy in the progress of phthisical cases, the quick pulse, loss of appetite, thirst, and other febrile phenomena being dependent on causes like those which occasion symptomatic fever in general. The timely administration of *Acon.* removes congestion, and modifies *febrile action.*

Nux Juglans.—Tubercular consumption, with scrofulous cachexia ; swollen glands, etc.

Gallic Acid. —Severe hæmorrhage from the ulceration of an artery. Two grains of the 1x trituration may be given every hour until the bleeding is arrested.

Morphia.—Small doses injected subcutaneously exert a prompt, decided, and almost invariable control over hæmoptysis.

Nit.-Strychnia. — Indigestion, with frequent vomiting ; abundant secretion in the lungs.

Inhalation (see Sec. 37), often a useful method of administering such remedies as *Iodine, Kreasote, Aconite, Bryonia, Hyoscyamus, Belladonna, Ipecacuanha, Sulphurous Acid,* etc., is especially so when the throat and large bronchial tubes are involved. Apart from medicines, the simple vapour of hot water is of great utility; it soothes the inflamed mucous membrane, and facilitates the removal of mucus from the air-passages. Where, however, there is great debility, the physical effort of drawing the vapour from an inhaler is injurious. The patient should then be surrounded by a moist or medicated atmosphere arising from a vessel placed near his side.

Dr. J. Compton Burnett recommends *Psoric* (old cases) ; *Thuja* (when vaccination has been unsuccessfully performed) ; *Glon., Iodoform, Hyd. Can., Chel. M., Pyrogenium, Tereb., Carduus M., Ceanothus,* etc. And, particularly in the early stages of the disease, the new cure of *Consumption by its own Virus.* He administers the *bacillic virus* in high potencies every sixth to tenth day.

"*Kalm C.* (cough between two and three a.m.) ; *Bapt.* (fever low, approaching typhoid) ; *Jaborandi* (when perspirations are so profuse as to form leading symptom ").—*J. H. Clarke.*

General Measures.—In order to describe in detail the

general treatment of consumptive patients, it would be necessary to write a treatise on hygiene; we shall therefore only mention several of the most important points, and refer the reader to Sections 1 and 2; also to that on "Scrofula."

1. *Nutritious Food.*—The diet should be nourishing, digestible, and sufficiently abundant; including animal food, as fat* as can be digested, once or twice a day; fish, especially oysters; good home-made bread, not less than one day old; puddings of arrowroot, rice, sago, or tapioca, with milk; various kinds of green vegetables and mealy potatoes; *good milk*, eggs, raw or beaten up with a little milk; and, if the patient is benefited by its use, a moderate allowance of beer or wine. Great discrimination should be observed with regard to stimulants; if they flush the face, or accelerate the pulse, they should on no account be indulged in. Malt liquors are more suitable than wine or spirits. The English extract of malt affords palatable fat-forming material of an unstimulating nature. Pork should be avoided; also veal; shell-fish; pastry; and all articles that give rise to irritability, nausea, eructations, or any other symptoms of indigestion.

Koumiss is a useful article of diet both in the threatened and subsequent stages of Consumption, and can often be taken when nothing else will be retained. *Koumiss* contains *carbonic* and *lactic acids*, and a small amount of *alcohol*; to these it owes medicinal as well as digestive and food properties.

The following *dietary* is suggested. At 7 or 7.30 a.m., or even earlier, a tumblerful of warm milk. In case of acidity or other forms of Indigestion, two tablespoonfuls of lime-water may be added to the milk; or if there be much debility a dessert-spoonful of rum may be substituted for the lime-water; or the lime-water and the rum may be alternated as required. 8.30 to 9.30, *Breakfast.* Bread-and-butter, and a lightly-boiled egg; or cold boiled or hot broiled bacon, or a broiled sole or other kind of fish, and a cup of black tea. At

* Dr. J. H. Bennett states that he has known several young men, on sheep farms in Australia, recover from tubercular disease by eating fat mutton, and galloping about on horseback.

11.30 or 12, a glass of cold milk, in which a new-laid egg is beaten up. At about 1.30, *Dinner;* including a slice of roast mutton or beef, rich in fat; or a portion of fowl, or other light meat, with vegetables; and tapioca, rice, semolina, or other milk pudding. A glass of malt liquor may be allowed if it do not, as before stated, increase the pulse, flush the face, or make the patient feel sleepy and heavy. At about 6, a cup of good cocoa, with a sandwich, or bread-and-butter. White fish, fowl, or other light meat may sometimes be added. Green vegetables—water-cresses, lettuce, etc.—may often be allowed with great advantage. If anything be desired after this meal, a small basin of toast and milk, oatmeal-porridge, or other easily-digestible farinaceous food, may be taken at 8 or 9 p.m.

Raw Meat Juice, if suitably administered, is a valuable adjunct to the food of the consumptive. It may be prepared thus:—A pound or a pound-and-a-half of fresh beef, without fat and bone, should be plunged into boiling water, over a brisk fire, for a few minutes only, just to harden the outside, so that its elasticity may be lessened and that it may afford some little resistance to pressure. The meat should then be cut into pieces to fit the meat-press, and the juice thoroughly expressed. The juice should now be mixed with equal parts of *refined* broth (otherwise the albumen is coagulated) made of stewed bones and gristle, thickened with tapioca, vermicelli, etc., and flavoured with salt and pepper. The extract of juice should be made fresh every day. Half the quantity produced may be given for breakfast instead of the egg or meat in the above dietary; and the other half at dinner, or instead of cocoa at "tea," according to the appetite and digestive power of the patient.

Cod-liver oil must be considered as an item of food, and a very important one; for by its use richer chyle is formed, and consequently better blood. In some cases, however, oil disagrees with the stomach, and then we have found *Cream* a valuable, though decidedly inferior, substitute. To favour its digestion a teaspoonful of French brandy or a tablespoonful of cold strong black tea may be mixed with it.

Cough mixtures, lozenges, etc., lessen the appetite, lower

the digestive power, irritate the stomach, and are therefore to be avoided.

2. *Clothing.*—This should be sufficiently warm to maintain a vigorous cutaneous circulation; the extremities especially should be kept warm, to obviate congestion in the chest or abdomen. The neck and chest should be covered, the beard cultivated in men; women should avoid low dresses, and always have ready a shawl for protection even during short exposure. Flannel should be worn both in summer and winter; in the former it neutralises any variation of temperature, and prevents sudden cooling by evaporation; in the latter, it prevents loss of the vital warmth of the body. In winter, the addition of a chamois leather vest may be worn over the flannel. The notion that delicate children may be hardened by habitually exposing them to atmospheric changes, when but imperfectly clad, is erroneous in all cases; and, in children of tuberculous predisposition, often leads to the worst results.

3. *Bathing and friction of the skin.*—Except in confirmed cases, cold bathing or sponging is generally beneficial, and forms the best protection against the liability to frequent colds. Even sea-bathing may be sometimes recommended. But on no account should the patient bathe when exhausted by fatigue, or when the body is cooling. When sea-bathing is not admissible, sponging the chest both in front and behind, with salt water, can generally be borne and enjoyed, and, when it is followed by a general glow, is a most valuable aid in promoting capillary circulation. A warm bath three degrees lower than the temperature of the patient, with water added from time to time to maintain the temperature, lasting from twenty to forty minutes, according to the strength of the bather, given every second day, will greatly relieve the phthisical symptoms, if continued. Under all circumstances, vigorous friction should immediately follow the bath, as reaction is thus rendered more complete. In the case of patients who are prevented from taking exercise, friction by means of a towel or flesh-glove is the more indispensable. Bathing must be regarded as injurious if after a brief immersion the surface remains cold, numb, and pale, in

spite of good friction. In such cases, warm salt-water baths are to be preferred.

4. *Exercise.*—Next to diet, the daily exercise of the muscles and lungs in pure open-air is of the greatest importance. It should, however, be laid down as a rule for the patient *never* to proceed so far as to get much out of breath, or *really* fatigued. We say "really," for some patients are so indisposed to move, that fatigue is pleaded in justification of a neglect of exercise altogether.

Unfortunately, debility often begets an inertia, both mental and physical, which interposes serious obstacles to success, such patients surrendering themselves to death as an inevitable doom. Others occasionally have been met with, who, fully aware of the nature of their disease, but conscious that their life-mission was as yet unaccomplished, have bravely striven against pain, weakness, and other discouragements, and have nobly fought "the battle of life;" while the results remind one of the extension of life once granted in the old prophetic days; for, by the diligent use of means, they have "added to their life fifteen years."

Rowing, slowly climbing a hill, gymnastic exercises, and especially the *cross-bar-swing* (described in the Author's work on Consumption), are valuable aids when practised according to the patient's strength.

If possible, general exercise should be so taken as to bring all the muscles into moderate and agreeable action, and with the body in an erect posture. Walking-exercise secures these conditions to a certain extent; but riding on *horseback* has the advantage of permitting the patient to breathe a large amount of fresh air, while it does not occasion fatigue or great difficulty of breathing, and is, perhaps, of all the measures we have suggested, the one most calculated to avert Consumption. Avoiding excessive exertion of the mind or body, an interest should be fostered in the objects and operations of nature, such as the garden, the farm, the hillside, and the river.

For those who are too weak to adopt any of the foregoing exercises, taking the air in an open carriage, or in a boat, well protected from winds, gentle fishing, or, in suitable

weather, sitting at an open window, on a balcony, or in a garden. Any of these are infinitely better than being confined to one room day after day.

Dr. Nankivell recommends that "*Lung exercise*" should be taken twice daily, the patient maintaining a quiet sitting posture while he draws a succession of deep inspirations through the nostrils. For the more fully the lungs are judiciously used, the more is their capacity nursed; and conversely, the less they are used and expanded, the more useless are they likely to become. As the result of numerous observations, we can state that the good effect of this practice on debilitated lungs is remarkable.

5. *Healthy Residence.*—The *house*, its position and aspects, the prevailing winds (east and north-east are particularly injurious), the windows, the position of the bed, and the provision made for surrounding the patient with pure air without cold or draughts, are points of especial importance. Except during fogs, very cold or windy weather, the windows of the bedroom should be let down from the top. Healthy persons spend about one-third of their existence in the bedroom, while invalids often spend considerably more; obviously, therefore, good ventilation cannot be too strongly enjoined. The *climate* should be moderately warm, *dry*, and uniform, to suit the consumptive.

"What is really required is a cool temperate climate, free from great alternations of temperature, which should range from 55° to 66° Fahrenheit during the day, and from 45° to 55° at night. The air should be dry, or with only slight moisture, little rain, and a clear bright sun. Such an exhilarating climate, in which exercise can be taken almost daily in the open-air during the winter and spring months, is the best for the consumptive patient. It exists in the greatest perfection on the north shore of the Mediterranean, between Cannes and Savona in the western, and between Spezzia and Pisa in the eastern Riviera. It may also be found in various places on the south-east coast of Spain, especially at Malaga; on the north African shore, such as Algeria and Egypt, and many other places. In the western hemisphere, suitable places may be found, especially in the

islands of the West Indies; and in Australia, the southern shores of Victoria. The native of the British Isles who visits the sheltered nooks of the south European shore between Cannes and Pisa will be struck with the bright sun, clear atmosphere, genial yet bracing air, steady temperature, verdure and brilliant vegetation which surround him from January to March; months which at home are characterised by frost, snow, rain, fog, gloom, bleak winds, and a barren vegetation. After this period, however, the picture is reversed" (*Dr. J. H. Bennett*).

Striking benefit often results from a three-months' voyage —for instance to Australia, by the Cape of Good Hope, starting about the end of October. In such a case, the depressing effect of the Australian summer should be carefully guarded against, as also passing the winter at Cape Horn when returning. It is, however, only in the early stages of Consumption that a long voyage can be recommended, while the patient retains strength to bear up against the foggy or tempestuous weather liable to occur; so that by remaining pretty constantly on deck inhaling the pure sea-breezes, the restricted diet on board ship, and the loss of comforts and attentions enjoyed at home, can be fully counterbalanced.

In confirmed Consumption, particularly if Hæmoptysis is present, the straining liable to be caused by retching would be attended with considerable danger. For such patients a short voyage on a smooth sea, as the Mediterranean, would be preferable. Indeed, a suitable climate may be secured during the whole year: by visiting Italy in autumn, Nice and Mentone in winter and early spring, and returning later to some mild spot in England, Scotland, or Ireland. Many places of this description are to be found in our own isles, as Torquay, Undercliffe in the Isle of Wight, Hastings, Bournemouth, Exmouth, and Queenstown (Ireland), and to these patients may resort with great benefit, when removal to a foreign clime is impracticable.

But while exercising great care in the choice of a winter residence, let it be remembered that the selection of a *summer residence* is no less important; for a glaring sun, a sultry

atmosphere, and other discomforts of a hot climate, may counterbalance all the good obtained in the winter. In summer, moderate sunbeams, and a genial atmosphere, combined with charming landscape scenery of mountain, forest, lake, and river, may be found in general perfection in our own country.

PREVENTIVE TREATMENT.—There is an antecedent condition of tubercular Phthisis characterised by Indigestion, furred tongue, failing appetite, dislike to fatty kinds of food, pallor, loss of strength, and a generally ill-nourished condition, in which, as offering greater prospects of success, it is most important to secure treatment. That treatment would include the prescription of remedies, fresh air, healthy occupation, and good diet for improving the nutrition of the patient; in short, the *early* adoption of all those *general measures* which have already been pointed out.

77. Tabes Mesenterica (*Tabes Mesenterica*)—Consumption of the Bowels—Marasmus.

DEFINITION.—A growth of tubercle in the mesenteric glands, which destroys their structure, obstructs the passage of chyle, arrests the repair of waste in the tissues, and is associated with the characteristic phenomena of Scrofula.

SYMPTOMS.—Swollen and tense abdomen; irregular action, or, more generally, relaxation of the bowels, with unhealthy, fœtid stools; passage of undigested food; pain in the bowels, so that the patient draws his legs up towards the abdomen; at the same time he is feverish and indisposed to activity. There is also pale and flabby skin; anxious and aged expression; inordinate or fitful appetite. The process of absorption becomes suspended, so that the quantity of nutriment added to the blood is inadequate to the requirements of the system; Hectic fever sets in, with obstinate Diarrhœa, extreme thirst, restlessness, and sleeplessness; the body wastes until the degree of emaciation becomes extreme, hence the term *tabes* (a wasting or melting); and the patient dies, in most cases, from actual starvation. If, however, treatment is resorted to

before the glands are irreparably disorganised, a gradual recovery may be expected.

Treatment.—*Iodine* is one of the best remedies, because it has a specific influence on the glandular system; it is indicated where the glands are *enlarged* and the abdomen is tender, accompanied by *diarrhœa;* rough, dry skin; flushed face; emaciation; ravenous appetite, especially with the scrofulous diathesis.

Arsenicum.—Excessive *debility;* rumbling, frequent, nauseous, and exhausting discharges; sallow complexion; *emaciation;* thirst.

Calcarea Carb.—Wasting without apparent cause; enlarged, hard abdomen; listlessness; aged expression.

Acid-Phosphoric.—Night sweats, and other *hectic* symptoms.

Arsenicum-Iod.—Prostration; *weakness;* great thirst; and diarrhœa.

Mercurius Cor. (*premonitory diarrhœa*); Plumbum (*obstinate constipation*).

Brom., *Calc.-Phos.*, and *Sulph.* may also be required. For other remedies see the Section on "Scrofula."

Accessory Means.—The food should be *nourishing* and simple—fresh meat, goats' milk, beef-tea, *soda-water*, or lime-water, *with milk*, and *cod-liver oil*. *Pancreatic emulsion*, in teaspoonful doses every four hours, according to Dr. Dobell, cures the disease rapidly. Warm clothing, including a flannel bandage around the abdomen, is necessary, to guard against the vicissitudes of the weather. Change of air to the country or seaside; warm or tepid salt-water baths; and inunction with olive-oil, are also beneficial. The latter is a very important accessory in the treatment of all wasting diseases. The friction gently stimulates the organs to functional activity, and soothes irritation; while the oil is absorbed by the lymphatics, and conveyed into the circulation, giving tone and nourishment to the system. See also the *accessory treatment* of "Scrofula."

78.—Rickets (*Rachitis*).

Definition.—A constitutional disease of early childhood, characterised by mal-nutrition, especially by deficient supply of salts of lime, in consequence of which the growth of the bones is arrested, the form of the skeleton is much altered, and the solid visceral organs exhibit peculiar lesions.

It is essentially a disease of childhood, manifesting itself as early as the seventh to the eighteenth month, rarely after the twenty-fourth. It is probable that a child who is not idiotic or weakened by some recent acute disease, and who cannot walk at eighteen months of age, is either rickety or paralysed.

Pathology.—Rickets is a general disease, and though most manifest in the bones, implicates almost every organ of the body.

Changes in Bones.—The cranium, thorax, pelvis, and bones of the extremities are most frequently exposed to the rachitic degenerative process. The bones are affected in three ways: (1) their full permanent *growth* is arrested; (2) their complete *development* is prevented, by irregular and insufficient calcareous deposit; (3) their *formation* is altered; their density, solidity, and weight are lessened by the absorption of lime salts which have been previously deposited, subsequently dissolved in the blood, and then excreted by the kidneys. The bones are always found more or less soft, spongy, and pliable, and can be easily cut or bent, owing to the deficiency of earthy constituents (particularly of phosphate of lime), which amounts on an average to two-thirds of the quantity that should be present.

Sir William Jenner has thus enumerated the most common changes:—"Enlargement of the ends of the long bones, of the parts where the bone and cartilage are in contact—where the cartilage is preparing for ossification, and where ossification is advancing in the cartilage; softening of all the bones; thickening of the flat bones, such as the bones of the skull, the scapula, the pelvis; deformities which follow from mechanical causes acting on the softened bones, such as the deformities of the thorax, pelvis, spine, and long bones."

In slight cases, the affection of the bones may be very

limited,—the wrists and ankles a little enlarged, the shins bent, the spine curved, the fontanelles remaining abnormally open, and dentition retarded or arrested: all these marks, however, disappearing with the recovery of health.

In aggravated cases, the *skull* and *face* undergo remarkable changes. The skull is *larger* relatively, and often absolutely, than it should be; it loses its natural arched form, and becomes flat both at the top and around; the centres of the parietal bones, the bosses of the temporal bones, and the edges outside the sutures are thickened; the frontal, coronal, sagittal, and sometimes even the lambdoid sutures are depressed (this depression serves as a means of distinguishing a rickety from a hydrocephalic head, in which they are elevated); the fontanelle remains open, often widely open, long after the end of the second year. The forehead is high, square, projecting, and out of proportion to the face. While the skull is larger, the face is smaller than natural, on account of the arrest of growth of the bones, particularly those of the cheek and upper jaw. The small, triangular face, with narrow sharp-peaked chin and projecting teeth, affords, by its expression, an almost infallible evidence of the disease.

Dentition, both the first and second, is often delayed. If no tooth have appeared by the end of the ninth month, the delay is almost always due to Rickets; and if any teeth have appeared, they soon become black, decay, and drop out of their sockets, and further development is interrupted. The arrest of dentition is peculiar to Rickets, for in no other wasting disease does it occur.

The *spine* is bent with antero-posterior curvature,—rarely lateral; but the curvature is not prominent, unless there be considerable muscular weakness. If this be present, the head is not efficiently supported, and then seems to sink between the shoulders, the face being turned a little upwards.

The *thorax* is subject to remarkable change; it becomes narrow and prominent in front, and has suggested the popular term, "pigeon-breasted." The ribs curve inwards, and the cartilages outwards, forming a double groove on the face of the chest, on either side of the enlarged ends of the ribs, which are so enlarged that they form a row of nodules, like large

beads dividing the groove. This beading of the ribs is the most characteristic change in the bones, and can usually be detected earlier than any other sign. The *clavicle* is also distorted; the *humerus* curved at the point of insertion of the deltoid muscle; the *radius* and *ulna* are curved outwards and twisted; and the *scapula* is much thickened.

The *pelvis* is deficient and often singularly stunted and distorted. It varies greatly in shape, but is more frequently triangular than oval; and by its abnormal contraction, consequent on arrest of growth, the cavity is rendered perilously small for child-bearing.

The *femur* is curved forwards if the child cannot walk; forwards and outwards, if he can. The *tibia* is bent outwards if he cannot walk; forwards or outwards if he can. The effect of the curvatures is that the knees are widely separated from each other, and the child is "bow-legged."

The *articulations* also undergo change. As the ends of the long bones are enlarged, the joints into which they enter are enlarged also. This gives them a knotted and bulbous appearance.

The changes in the bones are generally coincident with tenderness and dread of movement. Curvature usually occurs in the following order: first, there is distortion of the tibia and fibula, caused by the superincumbent weight of the body, and then the femur is involved; but if the child creeps on all fours, the radius and ulna may be the first to become curved from the same cause. Afterwards, the distortion extends to the spine, the pelvis and sacrum, the ribs, the chest, the sternum and clavicles. The radius and ulna now become twisted and bent in the direction of habitual muscular force, the humerus becomes affected, and lastly, the bones of the head.

Changes in Ligaments.—Coincident with the alteration in the formation of the bones, there is a relaxation of the muscles by which they are held together. This accounts for their looseness and unsteadiness, and the ease with which they can be moved in those directions which are impracticable in a healthy condition. Hence arises the inability to walk—a very prominent symptom in those children whose bones are straight and well-formed, and in whom the disease has not

shown itself till about the end of their second year. As all the joints of the body share in this muscular relaxation, there occurs not only the inability to walk, but also the difficulty of keeping the body upright, which is so symptomatic of this disease.

Changes in Organs.—In consequence of the lessened capacity of the thorax, the liver and the spleen—both frequently abnormally large—are forced downwards below the level of the ribs. On the other hand, the shallowness of the pelvis does not afford sufficient room for the abdominal viscera. The effect of these two disarrangements is that the abdomen is very large and protruded, and frequently seems to be enormously distended in comparison with the small, distorted chest. The distention may be partly due to the accumulation of flatus, consequent on the flabby, feeble condition of the abdominal muscles, which renders them unable to fulfil their functions. Besides the enlargement of the abdomen, and the enlargement of the liver and spleen, when these glands are increased in size, a similar change takes place in the lymphatic glands all over the body; they also become larger and harder. To such an extent does this occur that the superficial glands —such as the sub-maxillary, axillary, and inguinal—may be felt as small, hard, round bodies, which move about freely to the touch.

As the organs become degenerated, their functions become deranged; hence we have Anæmia, slight Anasarca, flaccidity of the muscles, a sluggish state of the nervous system, pale urine, with diminished urates and increased phosphates, extreme emaciation, and waxy countenance.

Symptoms.—*Profuse perspiration on the head, neck, and upper part of the chest,* with dryness and heat of the abdomen and lower limbs. The upper portion of the body always exhibits an excessive moisture, which the slightest exertion or heat aggravates, and on the patient's falling asleep the increased perspiration saturates the pillow. The child also desires to *lie cool at night,* and in the coldest weather kicks off or gets outside the bed-clothes. These symptoms precede the deformities of the bones. A later symptom, especially marked in severe cases, is *dread of movement* from *extreme tenderness* of the sur-

face. He *wants to be let alone*, prefers to sit quietly or to lie down, and manifests signs of uneasiness on being touched or danced in the arms. As the disease advances, he lies motionless in bed, and cries at the approach of persons accustomed to play with him. The appetite is generally voracious, the patient often desires food soon after a meal, the peristaltic action of the intestines being so rapid that the food is hurried almost unchanged along the alimentary canal. The bowels are irregular, confined for a day or two, and then relaxed for an equal period; there is generally a good deal of straining, and the motions are extremely offensive and mixed with mucus. The child becomes dull, neglects his playthings, and usually gets thin; sometimes he looks plump while his flesh feels soft. In the day-time he is drowsy, but at night is restless and uneasy. If the child be not carried off by some associated disease, he dies of exhaustion or asphyxia.

Complications.—The constitutional debility, which is both a cause and a consequence of Rickets, renders the patient very susceptible to many other diseases, which may attack him with sufficient intensity to carry him off before the rachitic degeneration has reached its fatal issue. Measles, Scarlet-fever, and Whooping-cough are very likely to occur and prove fatal. Catarrh, Bronchitis, Diarrhœa, Laryngismus Stridulus, Convulsions, and Chronic Hydrocephalus are also common complications. But if none of these arise,—if the disease is simple, the bone-softening not excessive, the emaciation only slight,—and if the treatment is commenced early and persisted in, a favourable issue may be anticipated.

Softening and curvature of the bones often deprive a child of the use of its limbs; the deformity of the thorax produces difficult breathing; and the abdominal organs, especially the liver, are constantly compressed in consequence of sedentary habits. Sometimes there is inflammatory swelling of the bones, with suppuration, and caries; and derangement of the digestive organs, wasting, Hectic fever, &c., make their appearance, if they did not exist before. Under favourable treatment, however, the bones become very firm in adult life, and are remarkably strengthened by strong ridges on their concave sides.

Causes.—Rickets is not a diathetic disease, in the sense in which Tuberculosis and Syphilis are; it is the result of certain known causes, without which the disease cannot be produced, but under the influence of which children become rickety. Thus, it often arises in the children of parents who, though naturally healthy, live in disregard of hygienic laws. In children of the upper classes it is frequently occasioned by the mother weaning the child too soon, or not nursing it at all, but confiding it to the care of ignorant dependants to bring up by means of the bottle. As it is strictly a disease of the nutritive processes, it will be readily perceived how such conditions as the following would tend to produce it: ill-health or weak constitution of the mother, affecting the nutrition of the child before birth, and, after birth, by deteriorating the quality of the breast-milk; improper feeding generally, badly ventilated rooms, damp, cold, dirt, too little sun-light, scanty clothing, and neglect of exercise. The continued influence of these causes will produce that unhealthy condition of the body of which Rickets is the direct consequence.

Treatment.—This must be radical, and if commenced early, the best results, with little or no deformity in the bones, may be expected, for although one of the most common of children's diseases, Rickets is yet one most easily arrested. It has no course which it *must* run; and at any point the degenerative process may be stayed, a nutritive process initiated, the normal functions restored, and the growth of the child renewed.

Phosphoric Acid.—Rickety affections of the bones, with pains in the limbs, *Diarrhœa*, and other symptoms of *Hectic*.

Silicea.—Corrects the *perspiration about the head* and upper portion of the chest, and the sensitiveness before described; it also controls the tendency to the increased growth of cartilage.

Calc.-Phos.—In many cases of Rickets, this salt is of great utility, and if the child is fed by the breast, both the mother and child will be benefited by the medicine. Phosphate of lime has the power not merely to correct *deficient consolidation* of bone, but equally to correct the consentaneous unnatural growth and mal-nutrition of the soft tissues of the body.

Ars., *Asaf.*, *Phos.*, *Sulph.*, and *Ferri. Phos.* are also recommended.

Accessory Means.—The child should, if possible, reside in the country, where the air is dry and bracing, enjoy abundance of sun-light, and take suitable out-of-door exercises. These wonderfully aid the cure, by imparting tone to the digestive organs, energy to the nervous system, and, in short, invigorating the whole constitution. It is noteworthy that the disease makes more rapid course in the spring, less so when children have been exposed in open-air in summer. Patients not able to walk should sit or recline in the open-air, warmly clad, at suitable times in the day. This will be found far more helpful to recovery than passing the greater part of the day in the confined air of a sick-room. Further, tepid or cold bathing, if possible in sea-water, followed by continuous frictions, especially down the back, for five or ten minutes, with a repetition of the frictions in the evening, will prove highly beneficial. Well-ventilated rooms, strict cleanliness, and nourishing food, well masticated, or if the teeth be inefficient, pounded in a mortar, are also necessary. The diet should include milk, meat, animal broths, and cod-liver oil. The administration of a moderate quantity of finely scraped raw beef, followed by a dessert-spoonful of Tokay or Malaga, once or twice a day, is to be particularly recommended. *Malt* or *barley-food* is specially suitable for rachitic children. It may be prepared in the following manner: four tablespoonfuls of *ground* malt should be boiled for ten minutes in a pint of water, the liquid poured off, and a pint of new milk added. The sediment from the husk, if finely ground, need not be removed, as it is very nutritious, and rich in bone-forming materials. A simple change of diet will sometimes produce the desired effect, without the aid of medicine.

Cod-liver oil is an important remedy, having a specific action in this disease, but should only be given in small doses, ten to twenty drops at first, and the quantity gradually increased to a teaspoonful. During its administration the evacuations should be examined, for the appearance and odour of the oil in them are signs that the quantity should be reduced. (See Sec. 29.)

Great care must be taken to provide warm and suitable *clothing*. It should be warm and fit loosely. Flannel or merino should cover the whole body. A flannel abdominal bandage will protect the bowels and give such support as will aid the action of the diaphragm, by hindering its too rapid descent.

Mechanical Support.—On the subject of mechanical support, Mr. J. C. Foster remarks: "I am quite sure none yet invented is of any service. Splints on the outside and inside of the leg, boots, irons, etc., only add to the weight which already overburdens the feeble limb." Notwithstanding this excellent authority, we have often used splints with perfect success. The best for curvatures of the lower limbs are simple straight wooden splints, kept in place by a strong elastic bandage, or even an ordinary cotton roller. Very delicate children should first be treated by such remedies as we have already named, especially cod-liver oil; and the splints applied, if necessary, as the patient gains strength.

Cure of Pigeon-Breast.—In most instances, this deformity can not only be improved but radically cured, if the following simple method be adopted sufficiently early—that is, before the cartilages of the ribs have become partly ossified. The object is to develop the muscles of the chest concerned in breathing. Pressure is to be applied by the hands of an assistant, placed one on the projecting part of the breast-bone, the other between the shoulder-blades, the pressure being gentle but firm, and carefully increased as the patient takes five or six deep inspirations. The tendency of this pressure, if skilfully applied, combined with the inspiratory efforts, is to enlarge the sides of the chest in some measure at the expense of the projecting portion of the breast-bone. If this easy plan be followed twice a day for a few weeks, an astonishing change may be effected, the unnatural form of chest giving place to one of symmetry and beauty. At the same time, the muscles of the chest are to be brought into action in a special manner by varied movements of the arms and trunk. The *cross-bar-swing* is also a valuable measure for increasing the capacity of the chest, and is fully described in the Author's work "On Consumption," page 84. The so-called chest-expanders are

unnecessary and useless. The whole chest should be sponged with cold water every morning, and thoroughly dried by means of a towel. In cold weather, the sponging should be rapidly performed.

79.—Diabetes (*Diabetes*)—Diabetes Mellitus.

Definition.—A *cachectic*, constitutional, chronic disease, characterised by mal-assimilation of food and by excessive discharge of pale, sweet, and heavy urine, containing grape-sugar.

There are two diseases to which the term Diabetes has been applied, *Diabetes Mellitus* and *Diabetes Insipidus*. They resemble each other in the copious secretion of urine; but in the latter disease, which is comparatively rare, the urine contains no abnormal ingredient, is clear and colourless, and of low specific gravity (1·000 to 1·007). Thirst, a dry, harsh skin, and mental and physical weakness, are generally present. The simple name, Diabetes, applies exclusively to the former disease.

Pathology.—The most remarkable pathological feature of this disease is, on the one hand, a want of power to assimilate and employ for the nourishment of the body those carbo-hydrates which enter into the composition of the food, and, on the other hand, a perverted change of the carbo-hydrates, by which they are converted into diabetic sugar,—a product incapable of oxidation and of assimilation, and therefore excreted by the kidneys as useless and injurious. At first, the misappropriation of saccharine and amylaceous substances is only partial, but as the disease increases it becomes complete. The fats are also then transformed and perverted; and thus the whole of the carbonaceous elements which should nourish the system become worse than useless. Moreover, as they are not oxidised, the temperature of the body falls below the natural standard. Then comes a period of further degeneration,—the albuminous or nitrogenous elements in the food undergo the same depraved metamorphosis, and are withdrawn from the circulation, so that ultimately there is very little left for the nourishment of the tissues, and for the maintenance

of the temperature of the body. The quantity of sugar is thus increased, the urea becomes proportionately excessive, and the urine is very dense and superabundant. From evidence laid before the Pathological Society, it appears that the seat of Diabetes is in the Pancreas, Liver, or Duodenum; and that it arises from a disturbance of duodenal digestion, caused by pancreatic or hepatic organic disease.

Symptoms.—The disease comes on insidiously, long before the period when it is so fully developed as to cause a complete break-down of health. The first symptoms are *malaise*, weakness of the limbs, general debility,* constant thirst, frequent micturition, and some emaciation. Then these symptoms become more decided; and there is diminished sensibility of the limbs, loss of sensation in the feet, almost complete in the *soles*, so that the gait, even with the assistance of a stick, is unsteady. The tongue is red and fissured,† the mouth dry, the appetite voracious with sinking at the stomach, the bowels are usually costive and the evacuations dry, hard, and pale; the breath has a smell as of chloroform (almost diagnostic of the disease), and the urine is very excessive, with a faint odour as of apples (apparently due to a large secretion of glucose, for as this diminishes the odour correspondingly declines), and a sp. gr. of 1·035 to 1·050. As almost all the water taken passes off by the kidneys, the insensible perspiration is diminished, the skin becomes dry and harsh, and is frequently covered with an obstinate cutaneous eruption. In women, itching of the vulva is not infrequent; no doubt due to the irritation caused by the saccharine urine. These symptoms then manifest themselves,—increased muscular weakness; diminution of weight; shrinking of the frame, from atrophy

* A working man once answered Dr. Brunton, in reply to the enquiry, "I suppose that the first thing you noticed was that you made water very often, and were very thirsty?" "Oh, no! the first thing I noticed was that I could not do my day's work as I used to do."

† The late Dr. Freeman, of Cardiff, once drew our attention to a circumstance he had observed, which he also communicated to one of our periodicals, that papillæ circumvallatæ were enlarged in several cases of Diabetes which he had had under his care. If the enlargement be usually present, it of course forms a ready and important diagnostic sign. Dr. R. K. Ghosh, of Calcutta, gives a Diabetes cure with Kreosotum 3x. See *Homœopathic World*, vol. xxv. p. 488.

of the muscles and adipose tissue ; soft, spongy, painful condition of the gums, with looseness of the incisors, similar to what is met with in scurvy ; pain about the loins ; loss of sexual power and sexual desire ; coldness of the extremities, with burning in hands and feet ; Œdema of the legs ; sometimes Boils, Carbuncles, Albuminuria. Lesions of the brain undoubtedly occur ; they are manifest in dimness of sight, with tendency to Amaurosis by double Cataract. The pulse remains normal. There is diminished consumption of oxygen, and decreased production of carbonic acid by respiration. In advanced stages some low form of lung Inflammation, or Phthisis, generally complicates the case. The temperature is almost uniformly below the natural standard, rarely exceeding 97°, and sometimes falling as low as 94° or 95°. Even when the Diabetes is complicated with Phthisis, the temperature, instead of being raised, is generally below the normal point.

The quantity of urine throughout the course of the disorder is generally in great excess, amounting to from eight to twenty or even thirty pints daily, inducing frequent calls to micturate, day and night, and producing soreness and Inflammation of the urethra. Thirty pints of urine of the specific gravity of 1·040, which is about the heaviest, contains nearly four pounds of sugar. In a few months patients often pass a quantity of sugar equal in weight to that of their own bodies.

Diabetic Test.—Diabetic urine is of a pale straw-colour, has a faint smell of apple, hay, or milk, is of high specific gravity (1·030 to 1·050), and is passed in large quantities. When there are excessive discharges, especially if associated with symptoms already mentioned, an examination of the urine should be made. There are various tests for diabetic sugar, but the one most readily practised is *Trommer's*, and is as follows :—Half fill a test-tube with the urine to be examined, and add about two drops of a solution of *sulphate of copper* to make it slightly blue, and then excess of *liquor potassæ* enough to clear it, by re-dissolving the precipitate which it at first produces. Let it boil up once over a flame, and if there be sugar there will appear a reddish-brown precipitate of the

sub-oxide of copper; but if there be no sugar, a precipitate of black oxide of copper.

The presence of sugar is, however, not an infallible sign, for it may have arisen from some unusual article of diet, and be only temporary; the urine should therefore be examined more than once. Nor is excess of urine a certain sign, for excessive discharges of urine may also occur in Hysteria, Diabetes Insipidus, and other disorders. The most certain information concerning diabetic urine may be obtained from its gravity, which varies from 1·025 to 1·040 or upwards, according to the quantity of sugar it contains. Whenever the urinometer stands above 1·030, we may conclude that sugar is present.

Cause.—A malversation in the function of digestion, chiefly due to some dyscrasia of the liver, so that sugar, which ought to be available for the maintenance of the body, enters the blood, leaves it again unchanged, and is discharged in the urine. Here we refer not merely to sugar which is taken as such into the mouth, but to that which is formed out of the starch contained in food by the action of the saliva. Although Diabetes was formerly associated with Albuminuria, and other diseases of the kidneys, we now know that these organs are not at fault, and that they only separate from the blood the excess of sugar which it contains. The blood always contains more or less sugar, but unless the amount of sugar be more than one-third per cent. it is not so eliminated (*Brunton*).

Prognosis.—*Favourable.*—Corpulence, easy circumstances, healthy residence, early, energetic, persevering treatment. Maturity. Women are more easily cured than men, if the strength is maintained. Soft skin with normal perspiration and moderate appetite. Cutaneous eruptions. Saccharine urine not excessive is less dangerous than when the secretion is very great. Diminution, or total disappearance, of sugar, when saccharine and amylaceous diet has been avoided. Transformation of Diabetes in a fatty diathesis. Polyuria instead of Glycosuria.

Unfavourable.—Infancy and youth; few under twenty years of age recover. Spare habit. Neglect, misery, residence in unhealthy dwellings. Long duration, or general severity, of

the symptoms. Failure in reducing the quantity of sugar in the urine. Gangrenous inflammation. Large quantities of lime in diabetic urine indicate approaching Phthisis. Thoracic or intestinal complications. Tuberculosis, Albuminuria, Amblyopia or permanent Cataract, are very bad omens.

Duration.—The course of the disease is slow, with frequent ameliorations and exacerbations, and usually lasts several years. Relapse is so probable that complete cure cannot be affirmed till a full year has passed.

Treatment.—*Acidum Phosphoricum.*—This medicine, with attention to dyspeptic symptoms, generally relieves, and not unfrequently cures. The special symptoms calling for it are, —frequent urging to urinate, pain in the loins, emaciation, and prostration; it is particularly valuable in cases of a *nervous origin.* Immediate improvement ensues, both in general health and in the condition of the urine. In one case reported, "at the end of the fourth week the sp. gr. was 1·018, and there was less sugar by about one-fourth. After the lapse of four months the patient was perfectly well." We have found that great benefit follows from the administration of this remedy in the lx dilution, several times a day. Our own experience is abundantly confirmed by those with whom we have conferred upon the subject, especially Drs. Dalzell, Harvey, Holland, and Wilde. Large doses of the acid—an ounce daily—are said to increase the sugar in the urine.

Uranium Nit.—This medicine has sometimes proved efficacious. Dr. Cornell has furnished us with interesting details of several bad cases cured by it. Dr. Holland has also reported to us a case in which, under *Uran.-Nit.*, *Ac.-Phos.*, and bran biscuits instead of ordinary bread, the urine was reduced in four months in quantity from four quarts to three pints, and in sp. gr. from 1·048 to 1·025. The strength returned with great rapidity, the general healthy appearance was restored, and there was no relapse. The *Lancet* gives details of a cure by *Uran.-Nit.* The patient was given $\frac{1}{6}$ of a grain in water three times a day, and afterwards increased to $\frac{1}{3}$ gr. A week later the patient was much better, and by the end of the second week the bowels were regular, the appetite and quantity of urine no longer excessive. The

usual diet was then resumed, and muscular weakness alone remained.

The changes in the condition of the urine are thus recorded:—

March	11	sp. gr. 1·038	Much sugar.
,,	21	,, 1·021	Sugar—a trace.
April	8	,, 1·025	No sugar.
,,	15	,, 1·024	,,
,,	25	,, 1·025	,,

And it is added, "As many cases of rapid cure, and many of permanent palliation, of this disease by the use of this drug have been recorded, it is to be hoped that practitioners of large experience will properly test its value in cases of Diabetes Mellitus." The records are certainly to be found in homœopathic journals.

Terebinthina and *Arum Tryphillum* have also proved remedial. *Helonin* has been successfully administered by Drs. Hale and Payne. *Muriate of Quinine* is found to remove sugar from the urine. *Plumbum* also promises to be a successful remedy; its action is specifically on the kidneys.

Ars., *Dig.*, *Nux V.*, *Canth.*, *Eup.-Pur.*, *Chim.* or *Merc.*, are often required to meet special symptoms.

"*Nat.-Sulph.* (in gouty persons); *Syzygium* or *Silic.* (if previous remedy fails). In extreme cases the patient may be put on Diabetic Koumiss exclusively."—*J. H. Clarke.*

Accessory Treatment.—Amylaceous food, and every substance containing sugar, or that is readily convertible into it, should be avoided. The most nutritious food should be preferred, and the greater portion consumed in the fresh state. Fat meat, fish, oysters, eggs, milk, good soups thickened with finely-powdered bran, cocoa prepared from the nibs, green vegetables, lettuces with oil, vinegar, etc., may be taken, if they agree, and be varied to suit the patient. The action of all articles must be watched, and anything that occasions indigestion or increased saccharine secretion avoided. As a substitute for ordinary bread, which is inadmissible, *bran bread* or *bran cakes*, or *ground almond powder* made into bread or biscuits, with eggs, are recommended. "Diabetic bread" made of the following ingredients bears a closer resemblance

to ordinary brown bread than any previously suggested, and is often found more palatable. To eight parts of gluten add two parts of bran nearly free from starch, and a small quantity of butter. It is more nutritious than any other, and prevents or corrects constipation. The excessive thirst of diabetic patients may be gratified, as fluids aid in the elimination of the sugar in the blood, and patients become greatly depressed if they are not allowed to drink as much water as they desire. Warm baths, the use of flannel, and a warm climate are valuable accessories in the cure of Diabetes. Dr. Bouchardat recommends "laborious bodily exercise, especially gymnastics," observing that profuse perspiration on farinaceous food lessened sugar in the urine. The improvement consequent on a course of Carlsbad or Vichy mineral waters is sometimes very marked. Cold winds, sudden draughts or changes, are injurious.

Skim-milk Treatment.—Several cases have been reported in the medical journals of Diabetes in which the quantity of urine was steadily and greatly diminished, and the specific gravity correspondingly reduced, by restricting the patient to six pints of skimmed milk per day. This treatment is cheap, and patients can adopt it without interfering with their usual occupations. Mr. H. May (Birmingham) gave five pints of milk a day to a diabetic patient, and in six weeks the specific gravity fell from 1·040 to 1·017; the patient at the same time became stout, and stronger than she had been for years. Dr. Donkin has also successfully prescribed it; but he insists that "skim-milk loses its curative power altogether, and becomes valueless as a remedy in Diabetes, when administered in combination with solid animal or other nitrogenous food. By the skim-milk treatment," he says, "I mean the administration of skim-milk properly prepared, in quantities measured and limited to the requirements of individual cases, given at regular intervals in definite doses, and to the exclusion of all other food for a longer or shorter period. This system of treatment, in short, must be pursued in a strictly methodical manner, and according to rule; and *if this is not done, success must not be expected.*" He gives seven to ten pints, according to circumstances, divided into meals taken at regular inter-

vals. Two or three pints may be made into curd, daily, by the essence of rennet. Dropsy has also been very successfully treated with milk diet in India. Hence we may presume that skim-milk has some physiological effect on the kidney and its secretions. After the skim-milk has been taken for about six weeks, almost every variety of animal food may be taken once, twice, or thrice daily, and bran biscuits, gluten bread, diabetic bread, and dry wines may be added by degrees to the dietary.

Dr. Pavey, who has paid considerable attention to *Diabetes*, recommends the following

Dietary for the Diabetic.

May be eaten.—Butcher's meat of all kinds, except liver; ham or other meats, smoked, salted, dried, or cured; poultry; game; shell-fish and fish of all kinds, fresh, salted, or cured; animal soups—beef-tea, broths—not thickened; almond, bran, or gluten, substituted for ordinary, bread; eggs dressed in any way; cheese, cream cheese, butter, cream; greens, spinach, turnip-tops, mushrooms, water-cress, mustard-and-cress, cucumber, lettuce, endive, radishes, celery; vinegar, oil, pickles; jelly, flavoured not sweetened, savoury jelly; blanc-mange made with cream, not milk; custard without sugar; nuts, except chestnuts; olives.

May only be eaten in moderate quantity.—Turnips, French beans, Brussels sprouts, cauliflower, broccoli, cabbage, asparagus, sea-kale, vegetable marrow.

May be drunk.—Tea, coffee, cocoa from nibs; dry sherry, claret, dry sauterne, burgundy, chablis, hock; brandy and other spirits not sweetened; soda-water; Burton bitter ale, in moderate quantity.

Must be avoided.—Sugar in any form; wheaten bread and ordinary biscuits of all kinds; rice, arrowroot, sago, tapioca, macaroni, vermicelli, potatoes, carrots, parsnips, beetroot, peas, Spanish onions; pastry and puddings of all kinds; fruit of all kinds, fresh and preserved; milk except sparingly; sweet ales, mild and old, porter, stout, cider; all sweet wines, sparkling wines, port except sparingly; liqueurs.

80.—Purpura (*Purpura*)—Land Scurvy.

Definition.—A morbid condition of the blood and capillary vessels, apparently independent of specific poison or of chronic organic disease, causing disintegration of the red blood corpuscles, and cutaneous hæmorrhage, thus giving rise to red or claret-coloured maculæ of small size, except where they run together in patches, not effaceable by pressure, but dying away with succession of fresh eruptions in adjoining patches of skin. This is the *simple* form (*Purpura simplex*). When the disease is accompanied by hæmorrhage from a mucous surface—such as the gums, mouth, kidneys, intestinal tract, lungs, etc.—it is called *hæmorrhagic* (*Purpura hæmorrhagica*). When the hæmorrhagic spots are small they are termed *petechiæ;* when larger, owing to the confluence of *petechiæ*, *vibices;* when larger still, *ecchymoses*.

Symptoms.—Languor, faintness, and gnawing pains in the stomach usually precede, for some weeks, the appearance of spots. The appetite is variable, now deficient, now excessive, the tongue yellowish, the countenance sallow, dingy, or bloated and pale, the eyes dim, the conjunctivæ swollen; Epistaxis is common; the pulse is feeble; palpitation and irregular action of the heart, with tendency to frequent syncope, are the most distressing and dangerous symptoms. To these are added deep-seated pains in the stomach, chest, loins, or abdomen, constipation, etc. The spots first appear on the legs, and afterwards, without any certain order, on the thighs, buttocks, arms, and trunk, their presence being attended with great weakness and depression of spirits. They are first bright-red, but are distinguished from flea-bites by the absence of a central puncture; in a day or two they become purple, afterwards brown, and when about to disappear, they assume a yellowish tint, and frequently have the appearance of *Bruises*. Intermingled with the fading specks there are fresh eruptions, following each other successively. When the mucous membrane is invaded, the disorder assumes an aggravated character. A peculiar danger arises when there is extravasation of blood into internal organs—the lungs, the brain, the liver, or the alimentary canal.

P. simplex is a disease of very little consequence, but *P. hæmorrhagica* occurs only in the most critical condition.

Epitome of Treatment.—

1. *Febrile symptoms.*—Acon.

2. *Purpura simplex.*—Acon. (sometimes alone sufficient), Bell., Arn., Merc., Ac.-Sulph., Rhus. V., Phos.

3. *Purpura hæmorrhagica.*—Ham., Merc., Ars., Phos.

"Merc.-Vir. (*Spongy gums, fœtid breath, flabby muscles, swelling of ankles*); Lach. (*aggravation of all symptoms after sleep, icy coldness of feet*); Phos.-Ac. (*great nervous depression*); Crotal. (*disorganization of the blood*)."—*J. H. Clarke.*

Accessory Means.—The general health must be improved by simple, good food, plenty of exercise in the open-air and sun-light, healthy dwellings, and other hygienic conditions.

81.—Scurvy (*Scorbutus*).

Definition.—A morbid chronic condition of the blood and capillary vessels, causing sponginess and hæmorrhage of the gums, subcutaneous effusions of blood of considerable extent, and a peculiar sallow, dusky pallor of the skin.

Causes.—The disease arises from a peculiar state of malnutrition, in which the albumen of the blood is changed, and which supervenes gradually upon the continued use of a dietary deficient in those salts of acids, citric, acetic, tartaric, lactic, and malic, which are found in fresh vegetables. Its occurrence is greatly aided by general deficiency and limited range of food, exposure to cold and wet, and mental and moral depression. It terminates in death, after a longer or shorter interval, if the conditions under which it arose remain unaltered. This disease, which has been looked upon at various times as a plague, as a mysterious infliction of Divine justice, or as a disease inseparable from long voyages, has been proved, by evidence of the most satisfactory character, to arise from causes in the power of man to prevent, and to be curable by means which every habitable country affords.

Symptoms.—Change of colour of the skin, especially of the face and eyelids, to a dull leaden pallor; excessive bodily

and mental lethargy; horrible despondency; dyspnœa upon slight exertions, unaccounted for by the auscultatory signs; rheumatic-like pains in the limbs, but without fever; spontaneous effusions of blood-coloured fluid into the various tissues of the body, causing petechiæ and bruise-like patches to appear on its surface; a livid, swollen, and spongy state of the gums which bleed upon the slightest irritation (the diagnostic symptom), and often slough; easy susceptibility of all parts of the body, and ecchymosis on the slightest rub or blow; swelling and stiffness of the legs; Diarrhœa; Dysentery; putrescence; exhaustion.

Treatment.—All that is required to cure a scorbutic patient is the supply of those articles of food—*fresh vegetables, milk,* and good dietary generally—which contain elements the absence of which has led to the diseased condition. Eight to twelve ounces of *potatoes* a day *are sufficient* to prevent scurvy. *Vinegar,* good *lemon-juice,* and other vegetable acids are also recommended. Citrates, tartrates, lactates, and malates of potash should be used as drinks, or added to the food. An ample supply of these acids, as well as of *preserved vegetables,* should be provided for ships which are engaged in war, or have to make prolonged sojourn where fresh vegetables cannot be obtained. For the ecchymosis and infiltration, compresses moistened with *aromatic vinegar,* or spirits of *Camphor,* are very useful. *Bry.* and *Ferr.* will correct some of the scorbutic symptoms. The following treatment is also recommended by a recent authority: *Merc. Sol.* internally, *and* locally on open sores, compresses of a weak *Hamamelis* lotion (ten drops to the pint); as a wash for the mouth a solution of *Potass. Chlor.* (ten grains to the half-pint).

82.—Anæmia (*Anæmia*).

Definition.—Deficiency or poverty of blood, in which the *red corpuscles are deficient,* the *liquor sanguinis* is watery, poor in albumen, and contains (frequently) excess of salts.

Symptoms.—The skin, the lips, and the mucous membrane generally have a pallid, bloodless appearance, and the face

looks like wax; the lining of the gums and mouth is white, and the tongue is large, flabby, and pale; the pulse is feeble, thready, excitable, and beats about eighty times in a minute. But the most marked feature connected with the circulation is the *anæmic bruit* or *bruit de diable*, a continuous humming or cooing sound, heard over the large blood-vessels of the neck, or of the præcordial region, due, it is probable, to the tenuity of the blood. Distinct vibrations resembling those of a musical chord can also be *felt* over the spot. The patient becomes very *weak* and languid, is easily fatigued and loses breath; suffers from Indigestion, loss of appetite, flatulence, and irregular action of the bowels; in the case of women there is scanty menstruation, Palpitation, deficient temperature of the surface, and especially of the extremities, and frequently œdema of the ankles, or even of the feet. There may also be dejection of spirits, and morbidly heightened nervous sensibilities.

Causes.—Seclusion from air and sunlight, a poor quality or insufficient quantity of food, or a diet that has induced functional derangement of the liver. The pale, pasty appearance of anæmic, chlorotic, and scrofulous patients, in whom the red blood corpuscles are deficient, is probably due in the first instance to hepatic derangement. On the social conditions which occasion the disorder, Dr. Pollock says: "The sufferers are the victims of our subterraneous kitchens and back shops, and of that atrocious domestic system which deprives young women in service of open-air exercise and enjoyments peculiar to their age. Secondarily, a depraved appetite arises, and tea with bread-and-butter come to form their sole diet, as all healthy desire for meat soon vanishes. These devitalised plants, which never see the sun, languish in nervous power, and furnish our worst cases of Hysteria."

Other causes are—copious or frequent small discharges of blood, as in Hæmorrhoids, too profuse menstruation, venesection, etc.; profuse or prolonged loss of fluids which contain much of the organic constituents of the blood, as in protracted suckling, Leucorrhœa, Diarrhœa, Dysentery, Ague, etc.

Anæmia and Consumption.—The diagnosis between these two diseases is easy, as the physical signs of Consumption are

absent in Anæmia. In the latter, the blood is only *impoverished;* in the former, it is *contaminated* also; in the latter, the pulse is about normal; in the former, it is accelerated; and again, in Anæmia the *temperature* is below the normal standard; whereas in Consumption it is considerably higher.

Epitome of Treatment.—

1. *From loss of animal fluids.*—Chin., Ac.-Phos., Ferr.-Acet., Ars.

2. *With scanty or suppressed menstruation.*—Puls., Ferr.

3. *From deficient open-air exercise and sun-light.*—Ferr. and Puls. or Nux V. *Nat.-Sulph.* has been recommended as specific.

Other authorities recommend "Nat.-Mur. (*constipation, palpitation on lying down*); Plumb.-Acet. (*obstinate constipation*); Petrol. (*much sickness, inability to retain food*); Calc.-Carb. (*with excessive menstrual loss*); Ac.-Picr. (*indisposition to bodily or mental exercise, great increase of urates and phosphates in urine*); Helonias (*Chlorosis with mental depression*); Silic. (*in infants, with tendency to rickets*); Arg.-Nit. (*acute epigastric pain and tenderness, palpitation and fainting*)."

Accessory Means.—The above remedies are only prescribed as auxiliaries to the hygienic treatment. *Nourishing, digestible diet* is needful in quantities as large as can be assimilated—milk, eggs, animal broths, and afterwards, fish, poultry, game, mutton, etc. *Moderate daily out-of-door exercise in a pure air* is indispensable; bathing, especially sea-bathing, aids restoration. (See Sec. 13.)

83.—Chlorosis (*Chlorosis*).

Definition.—Deficiency, or poverty of blood, in which the red corpuscles are small, pale, and deficient, the albumen is normal, the serum excessive, and the fibrine sometimes increased, causing general debility and affecting young persons, especially females, at about the age of puberty. This condition of the blood gives the skin a pale, yellowish, often greenish hue, so peculiar that the disease is popularly called *green sickness.* It is to be classed among those functional dis-

orders which are apt to arise in connection with changes in the female organs of generation. For it occurs most frequently in females between the ages of sixteen and twenty-five.

The cure is not usually difficult, though if neglected the disorder may last for months, or even years, with tendency to relapse after cure.

Symptoms.—The appetite is diminished, fitful, perverted, or depraved, an incredibly small quantity of food being taken simply as a duty; or acids and highly-flavoured foods are desired; or there is craving for chalk, paper, coal, cinders, earth, etc. Obstinate constipation, or alternate constipation and relaxation of the bowels. Occasionally, ulceration of the stomach, and persistent vomiting, or even Hæmatemesis, with offensive breath. Peculiar recurring or alternating pain on one or both sides over the false ribs and *ilia*, unaffected by deep inspiration. Wasting of the cellular tissues and of the muscles; puffiness of the face which tends to obliterate the features; languishing eyes, œdematous eyelids, surrounded by dark circles, in strong contrast with the pearly, translucent appearance of the white-of-the-eyes, and the pallor of the lips. Dropsy of the ankles, dry skin, shrivelled hands, brittle nails, nervous palpitations of the heart, chilliness, particularly of the extremities; usually, an abnormally slow, weak pulse. The temperature of the body is diminished, and the patient is morbidly sensitive to cold. Menstrual irregularities, most frequently Amenorrhœa, sometimes with a leucorrhœal discharge. Listlessness; lethargy; melancholy; dislike to society; love of solitude, ease, and muscular inactivity. Frequently a slight, hacking cough, dyspnœa, and other chest symptoms, which at first sight are liable to be mistaken for those of Phthisis, but which clearly indicate the nature of the disease when the normal character of the respiratory movements and sounds, the absence of Hectic, and of any considerable wasting, and of the heightened temperature of consumptive patients, are taken into consideration. The attacks of headache are paroxysmal or periodic, confined chiefly to one temple, and aggravated by mental emotions. In short, the disease being *nervous* in its origin, every organ, tissue, and fluid in the body, is implicated.

Causes.—The chief *predisposing* causes are a lymphatic temperament and strumous tendency. Confinement in badly-ventilated or imperfectly lighted rooms, want of open-air exercise and recreation, studious, sedentary habits, chronic inflammation of the intestinal canal, enlargement and inaction of the mesenteric glands, uterine or ovarian disease, masturbation,* innutritious food, long-continued grief, anxiety, fright, or fatigue, form some of the immediate causes of Chlorosis.

Epitome of Treatment.—

1. *For the Cachexia.*—Ferr., K.-Carb., Ars., Calc.-C., Lyc., Sulph., Phos., Ferr.-Phos.

2. *Nervous Symptoms.*—Ign., Bell., Cham., Ac.-Phos., Coff., Acon.

3. *Menstrual Irregularities.* — Calc.-C., Leptand., Gels., Puls., Helon., Senec., Cham., Cycla., Graph., Coni., Caul.

4. *Digestive Symptoms.*—Puls., Nux V., Lyc., Plumb.

Leading Indications.—

Ferrum.—Fits of oppression, palpitation, anxiety; poor appetite; puffiness of the face; coldness of the feet with œdematous ankles; and Amenorrhœa, or a deficient, pale, or watery discharge. *Ferr.* often requires the aid of other remedies,—*Graph.*, *Sep.*, *Puls.*, *Helon.* Dr. Ludlam recommends *Citrate of Iron and Strychnia*, 3x; and Dr. Holcombe, *Phosphate of Iron*, 1x trit., for Chlorosis in strumous patients of a lymphatic temperament, especially when tissue-degeneration or other cachexia co-exists.

Calcarea.—Inveterate cases in *strumous patients;* anorexia; chronic acidity; pallor of the countenance; Leucorrhœa. It probably does good by correcting defective assimilation.

Pulsatilla.—Scanty or absent menses; loss of appetite or taste; tendency to relaxed bowels; weeping mood, in *uncomplicated cases.*

Helonias.—Defective digestion and assimilation; atonic conditions of the womb. Our experience fully justifies the designation of this remedy as *a uterine tonic.*

Graphites.—Too late, scanty, painful menstruation; constipation with large, knotty stools; unhealthy skin.

* Mothers should exercise great delicacy and caution whilst endeavouring to obtain certain information upon this all-important point.—*Hempel.*

Sepia.—Pelvic congestion, with Amenorrhœa or Menorrhagia; *Leucorrhœa;* sick head-ache; constipation.

Ignatia. — Nervousness; *depression*, or rapid emotional changes.

Plumbum. — *Obstinate constipation*, and general cachectic condition.

Arsenicum.—*Shortness of breath;* languor.

Ac.-Phos.—Symptoms traceable to *Masturbation.*

Natrum Mur.—Œdema; venous murmurs; enlarged spleen, consequent on rheumatic affections and Pneumonia.

Sulphur (in high dilution).—Chronic ill-health.

Accessory Means.—Good nutritious food, including animal broths, oysters, cod-fish, juicy *varieties* of meat, brown bread, and preparations of milk. Abundant exercise, riding, driving, walking, rowing, croquet, and other out-of-door games; a pure atmosphere; plenty of sun-light. Exercise, though distasteful, is especially necessary to the chlorotic, whose habitually cold skin impedes the action of the pores, and whose sluggish circulation causes an imperfect oxygenation of the blood, so that that fluid becomes half-poisoned and unable to impart to the various organs the vitality requisite to the performance of their proper functions. Cold bathing, particularly in sea-water. The use of cold water diminishes the morbid sensitiveness of chlorotic patients. When the shock of a cold bath cannot be at once advantageously borne, a tepid bath may be first employed, and the temperature gradually lowered.

84.—Dropsy, General and Local* (*Anasarca, Œdema,† etc.*).

Definition.—A serous or watery accumulation in the areolar tissue, more or less general throughout the body, with or without effusion into the serous cavities.

Dropsy (formerly, and more correctly, called *hydropsy*) is a form of Œdema, and an important symptom of disease, either

* In this Section are included most of the *local* forms of Dropsy, both for convenience of reference, and to present a more connected view of the subject.

† *Œdema* is a local dropsical swelling, from functional disorder, chiefly observed in the ankles.

in consequence of some mechanical impediment to the circulation, or of an altered condition of the blood (by excess of water or by biliary or primary contamination), the veins and their capillaries are over-distended, and the water exudes through their coats into the cellular tissue.

Dropsy is of two distinct varieties ; it is *general* (*anasarca*) when it permeates the meshes of the loose tissue beneath the skin ; and *local* when it is limited to any of the natural cavities or sacs of the body ; in this case it is named according to the parts involved. If the accumulation occur in the ventricles of the brain, it is called *Hydrocephalus ;* if in the membrane that lines the surface of the lungs, *Hydrothorax ;* if in the membrane of the heart, *Hydropericardium ;* if in the membrane of the intestines, *Ascites ;* if in the serous sacs of the joints (generally in the knee, rarely in the elbow), *Hydrops Articulorum ;* if in that of the testicles, *Hydrocele.*

According to Murchison, there are three forms of Dropsy—partial Dropsy, Dropsy at first partial but afterwards becoming general, and Dropsy which is general from the first. (1) Partial Dropsy is always due to excessive venous repletion ; and this over-distention of the small veins is the result of some mechanical impediment to the venous circulation. In advanced pregnancy women often suffer from a puffy swelling of the ankles, thighs, and even of the external organs of generation. Change of posture has great influence upon the swelling of the legs ; in the morning it is slightly perceptible, it increases during the day, and towards night it is at its greatest. Dropsy due to obstructed portal circulation may be recognised by the following clinical characters. It *begins* in the abdomen ; dyspnœa *follows*, but does not precede the Ascites ; there is a tendency to Vomiting, Diarrhœa, and Hæmorrhoids, or to Hæmatemesis. Further, the spleen becomes enlarged, and there are Varicose veins on the right side of the abdomen. (2) Dropsy at first partial but afterwards becoming general, commences in the feet and extends upwards ; this is also due to excessive venous repletion, from obstructed venous circulation. But here the obstruction is *cardiac*, and is most frequently caused by mitral disease, or fatty heart, or dilated right side of heart, consequent on

chronic Bronchitis and Emphysema. (3) Dropsy invading all parts of the body at once is due to diminished exhalation in one part, leading to compensatory exhalation in another. This is almost invariably *renal;* the urine is scanty, often loaded with urates, and sometimes albuminous. Here Dropsy results from diminished excretion of water by the kidneys, and is consequently chiefly met with in those forms of kidney-disease in which the tubes are blocked up by diseased epithelium or inflammatory products, as in Acute Nephritis and fatty kidney.

Character of the Swellings.—Dropsical swellings are soft, *inelastic,* diffused, and leave for some time the indentation made by pressure of the finger. In chronic cases, and when the œdema is very great, the skin becomes smooth, glassy, and of a dull-red or purple colour, and where the skin is less elastic, as over the tibia, it becomes livid or blackish, and even gangrenous ; or sloughs may form.

General Symptoms.—These vary according to the morbid state which has originated the effusion, and to the locality of the disorder. There are dyspnœa, palpitation, deficient perspiration, thirst, sickness, constipation, pricking heat of the limbs, heat and redness of skin after walking, stiffness of the limbs, which disappears after exercise, restlessness, weakness, mental distress, etc.

Epitome of Treatment.—

1. *Anasarca.*—Dig., Apis, Ars., Bry., Seneg., Apoc.
2. *Ascites.*—Apoc., Ars., Chin., Crot.-Tig.
3. *Hydrocephalus.*—Hell., Merc., Bell., Apis.
4. *Hydrothorax.*—Bry., Dig. Ars., Hell.
5. *Hydropericardium.*—Dig., Spig., Ars.
6. *Hydrocele.*—Iod., Rhod., Puls., Graph.
7. *Hydrops Articulorum.*—Acon., Puls., Iod., Bry.

Leading Indications.—

Arsenicum—Is a most useful remedy in *œdema of the face, hands,* and *feet,* and *Anasarca* from disease of the heart; also in Ascites from enlargement of the liver or spleen. It is especially indicated when there is much general *debility,* rapid *emaciation,* and anxious *depression;* constriction and oppression of the chest, and a sensation of *suffocation* on attempting

to lie down; the skin is dry and pale, or burning and itching, and sometimes peels off in large flakes; the *tongue is red* and parched, sometimes with excessive *burning thirst;* the pulse feeble and irregular, and the extremities cold.

Digitalis.—According to our experience in numerous cases, this is a most valuable drug in almost every variety of Dropsy, and often succeeds admirably in most desperate cases. It is well indicated by a small, feeble, and irregular pulse, pale face, livid lips, distressing dyspnœa, and inability to lie on the back in consequence of the large accumulation of fluid. It benefits dropsical affections from heart or kidney disease by improving the action of these organs, and will often relieve even when Uræmia is imminent. The tincture may be applied on a compress to the kidneys, or $\frac{1}{4}$ grain of the extract, rubbed up with water, may be injected subcutaneously, near the kidneys, in desperate cases.

Apocynum Can.—The value of this remedy is due to its power of restoring the urinary secretion, which it often does rapidly, even after other remedies have proved ineffectual. In alternation with *Cactus* it has cured General Dropsy with mitral regurgitation. The concentrated tincture, or an infusion, is the most reliable form for cardiac or portal Dropsy.

Apis.—The action of this remedy on the kidneys is sufficient to make it most useful in *acute febrile Dropsy* from a chill, in *post-scarlatinal Dropsy*, in that of incipient Bright's disease, and in that which sometimes appears in the later months of pregnancy, laying the foundation of future puerperal Convulsions; sometimes, also, for a time, it removes the *œdema of the lower extremities* symptomatic of disease of the thoracic organs. *Apis* is particularly valuable in Dropsy complicated with Strangury, Suppression, or other urinary difficulties.

Bryonia.—Œdematous *swellings of joints;* Hydrothorax; Dropsy or œdema from the retrocession of perspiration or an eruption, or associated with chest symptoms—Cough, dyspnœa—or with Liver Complaint, Constipation, etc.

Helleborus.—Dropsical effusion in the ventricles of the brain (*Hydrocephalus*), in Hydrothorax, and Anasarca, in which it often proves most valuable.

Senega.—Dropsy as a sequel of albuminuria, or sympto-

matic of disorder of the liver, Peritonitis, or abdominal tumours.

Ferrum.—*Functional œdema,* especially in anæmic or chlorotic females, with pale and cadaverous skin, feebleness, nausea after eating, *Constipation*, etc.

China.—Dropsical swellings from *exhausting discharges,* hæmorrhages, diarrhœa, etc.

Sulphur.—Œdematous swellings following *skin-affections* or suppressed *eruptions.*

Aconitum.—Chiefly in the commencement of Dropsy, and when Dropsy follows the sudden retrocession of perspiration, or of a rash, or is associated with Palpitation or organic disease of the heart. In the latter case, in alternation with *Digitalis.*

Aurum Mur.—"With depression of spirits, melancholia, difficulty of breathing."—*Burnett.*

"Tereb. (*with hæmorrhage from the kidneys*); Scilla (*acute dropsical swellings, with suppression of urine*); Ars. Iod. (*from organic disease of the heart*); Digit. (*if the pulse is feeble, irregular, fluttering*").—*J. H. Clarke.*

Accessory Treatment.—A *dry,* soft, and moderately warm atmosphere is generally most suitable: and if the Dropsy be at all owing to *climatic* influences, or to any *endemic* disease, a change of residence is necessary. A damp climate or soil is particularly unfavourable. In acute Dropsy, the diet should be similar to that in acute fever; in chronic Dropsy, patients require nourishing diet, but on account of the extreme feebleness commonly present, only easily-digestible food should be taken. To allay the burning thirst often experienced, cold water is the best beverage; but any other that the patient desires, if not positively injurious, may be taken. Water may be said to be a real restorative, for it increases the amount of fluids excreted to an extent greater than its own bulk; it also tends to improve the appetite and strengthen the pulse, while it diminishes the dropsical collections. It will thus be seen that the popular notion that drinking water increases Dropsy is quite erroneous.

Warm baths for promoting perspiration, small doses of Hollands, tapping, and other palliative measures may some-

times be necessary; for cases of Dropsy that do not come within the range of *cure*, often admit of very marked *alleviation*; and when the former is not attainable we thankfully accept the latter. But the propriety of the palliatives suggested can only be decided by the circumstances of each individual case.

85.—Beriberi (*Beriberia*)—The Bad Sickness of Ceylon.

Definition.—A constitutional anæmic disorder, characterised by great debility and by œdema, numbness, and stiffness of the lower extremities.

This obscure disorder is only known in some parts of India and in Ceylon, where it is endemic, and proves more fatal in the cases attacked than any other disease except Cholera. Its name is a local designation, signifying excessive weakness. It is most prevalent at the close of the rainy season, near the coast, but it does not manifest itself until after residence in the locality for eight or ten months.

Cause.—Local insanitary conditions produce an anæmic state which is favourable, in conjunction with endemic circumstances, to the development of the disease.

Symptoms.—The invasion is insidious; but under all forms of the disorder there are *numbness* of the general surface, *œdema* and *paralysis* of the lower extremities. These symptoms are accompanied or followed by great and progressive weakness, dyspnœa, swelling of the trunk and face, deep Anasarca, heat and dryness of skin, great thirst, intermittent pulse, scanty, highly-coloured urine, constipation. Death is sometimes extremely sudden—in the course of a few hours; at other times life may be prolonged for several weeks. Relapses are frequent and convalescence is lingering. Even after recovery, there are often painful *sequelæ*.

Treatment.—The anæmic condition must have primary consideration, and local disorders must be treated as they present themselves. For medical and hygienic remedies, see the Sections on "Anæmia" and "Dropsy."

Leading Indications. — *Aconitum.* — Whenever *feverish symptoms* are present,—heat and dryness of skin, thirst, rapid pulse, etc.

Arsenicum.—Excessive weakness; *dyspnœa;* œdematous swellings; intermittent pulse.

Ferrum.—Debility; Paralysis; dropsy; *constipation.*

China.—On subsidence of the disorder and to avert relapse; numbness; *feeble pulse.*

CHAPTER III.

Diseases of the Nervous System.*

86.—Encephalitis, Meningitis—Inflammation of the Brain (*Inflammatio Cerebri*).

Definition.—By "Encephalitis" is meant Inflammation of the *Brain or of its Membranes;* the term being used only when it is impractible to diagnose the *precise* seat of the Inflammation. "Meningitis" signifies Inflammation of the *Membranes* of the brain ("*Tubercular* Meningitis" has been already

* From the statistical returns of the Registrar-General of births, marriages, and deaths in England and Wales, we learn that nervous diseases—Congestion of the Brain, Apoplexy, Paralysis, Epilepsy, etc.—have considerably increased of late years, the average number of deaths in 1858 being but 1485·3 per million, while in the year 1883 they had increased to 1855; and in 1884 they were 1815. This augmented brain affection is no doubt the result of the overtaxed energies and feverish excitement in which great numbers live, and of the large amount of stimulants taken to sustain that excitement. Hence it is our honest conviction that if the suggestions contained in this Text Book be faithfully observed, they will lead to the moulding afresh of our commercial and social habits; and that daily exercise and recreation in the open air, true temperance, a less selfish and anxious pursuit of wealth, and a knowledge of the chief causes of disease, would materially reduce the present superfluous physical and mental wear and tear, and conduce to a more healthy, because a more natural mode of life. The more complete application of the early closing and weekly half-holiday movements to all departments of business, benefiting alike the employer and the

described, Sec. 73). By "Inflammation of the *Brain*" is meant Inflammation of the *brain-substance*, with or without implication of the membranes, usually partial, and in many cases dependent on local injury or foreign deposit.

Causes.—Inflammation of the *substance* of the brain is not common; it, however, may be caused by the morbid poison of some specific or constitutional disease, by mechanical injury through fracture of the skull, or by concussion without such fracture, or by the excitement of insanity or uncontrolled moral emotions, by Sunstroke, by intemperance, or by the recession of an eruption on the scalp. Inflammation of the *membranes* of the brain may be idiopathic, or caused in the same way as that of the substance of the brain.

Simple Meningitis may occur before birth, and is common in new-born infants, but is more rare after two years of age; the ages between sixteen and forty-five are next most liable; the disease also occurs in the proportion of three males to one female.

Diagnosis.—From *Tubercular Meningitis* the diagnosis may be made by comparing the two diseases as described; from *Delirium Tremens* it may be recognised by the absence of Headache in the latter affection, and the previous history of the patient, which "usually tells a long story of inebriations." In Enteric fever there is less Headache, but a more frequent pulse, Diarrhœa, abdominal tenderness, and after the fifth day the peculiar eruption of that disease.

Dr. Tanner gives the following table of symptoms as diagnostic:—

employed, would also greatly contribute to the diminution of diseases of the head. Having regard to the health as well as the happiness of the industrious classes, we strongly urge all employers to pay wages on Friday, and to give the weekly half-holiday on Saturday, our plea being strengthened by the experience of years, that work is better done when it is not excessive or unrelieved by recreation. Rest and out-of-door amusements are to the human frame what oil is to the wheels of machinery. To the whole community, then, we commend the rule, never shop after two on Saturday, or after six on any day, and thus help to secure for the city clerk, the busy shopman, and the toiling artisan, relief from his duties at noon on Saturdays, to enjoy amidst the scenes of nature, or in the bosom of his family, the unbending of his back and the unwrinkling of his brow, and ensuring from lighter hearts and invigorated bodies, greater diligence and better work.

CEREBRAL VOMITING.	GASTRIC OR HEPATIC VOMITING.
1. Little or no nausea, and the vomiting continues in spite of the discharge of contents of stomach.	1. The nausea is relieved, at all events temporarily, by the discharge. It returns directly food is taken.
2. No tenderness over liver or stomach. Pressure borne without inconvenience.	2. Tenderness over the liver and stomach. Pressure induces the inclination to retch.
3. The pulse is infrequent and hard.	3. The pulse is frequent and weak.
4. Tongue clean; breath sweet; conjunctivæ colourless or injected, and headache primary.	4. Tongue furred; breath offensive; conjunctivæ often yellowish; and headache secondary as to time.
5. Generally obstinate constipation.	5. Griping abdominal pain, diarrhœa and clay-coloured stools.
6. Stomach emptied without effort, no salivation.	6. Retching, and increased salivation.

Symptoms.—In Encephalitis there may be premonitory pains in the head, irritability, sleeplessness, and general indisposition. But usually the disease manifests itself at once—there is high fever, much Headache, Vomiting, Constipation, general sensitiveness both of the skin and the senses—sight, hearing, etc.—and violent Delirium; after a few days the Delirium is less; the patient clutches at the bed-clothes or the air, the pupils dilate and contract, and become insensible to light; there is grinding of the teeth, rolling of the head, and somnolence. The respiration is irregular; urine is retained; the bowels are still constipated; and the abdomen may become retracted. Muscular twitchings, Anæsthesia, Spasm or Paralysis supervene, with thready pulse, and Collapse and Coma set in. "The pupils are widely dilated, and are insensible to light, the eyes half open, the face sunk and ghastly, and the skin cold and clammy; the sphincters relax, the urine and fæces pass involuntarily, and the pulse becomes more frequent than before, but small, thready, and uncountable; the breathing is stertorous, and the patient at last dies in a state of complete Coma" (*Ranskill*).

In Inflammation of the brain-substance only (*Inflammatio cerebri*) the excitement and Delirium are not so marked, neither does the pulse rise above its normal standard: indeed,

it frequently falls below it, and is very irregular. There is also tonic rigidity of one or more limbs, which is succeeded by permanent Paralysis.

TREATMENT.—"The treatment of acute Meningitis is only successful when employed very early in the disease, and carried out with energy. It resolves itself into three great remedial measures: first, blood-letting; second, hard purging; third, application of cold water" (*Dr. Ranskill*). Homœopathic treatment is simpler, safer, and more successful than that prescribed above. The principal remedies are,—*Acon.*, *Bell.*, and *Bry.*, or *Arn.* alternately with *Acon.*, if the disease arises from an injury to the head. Syphilitic cachexia may call for *Merc.-Cor.*, or *K.-Hyd.* *Hyos.*, *Opi.*, *Ver.-Vir.* and other remedies, may sometimes be required; for their indications see Section on "Typhus fever."

The following are recommended by Dr. J. H. Clarke: Helleb. (*great depression, much pain in the back of the head and neck*); Apis. (*shrill cries in sleep, nervous fidgetiness*); Sulph. (*hot head, cold feet, patients subject to eruptions*); Zinc. Met. (*after the fever, when Bell. or Helleb. has been given*).

SPINAL.—Ac.-Olfal. (*stiffness and paralysis of the lower limbs*).

CEREBRO-SPINAL.—Cecuta Vir., Crotal. (*when the fever is of a low typhoid kind, and symptoms of blood-poisoning predominate*); Act.-R. (*should other remedies fail to relieve spasms*); Gels. (*after effects—paralysis*).

ACCESSORY MEASURES.—A bladder containing small pieces of ice, or a mixture of common salt and ice, is an excellent mode of applying cold, because of the facility with which it adapts itself to the shape of the head. The intense cold, several degrees below zero, which is evolved, allays the inflammation and calms the delirium. The hair should be shaved or cut close, and the extremities kept warm. Quietude is most important, and when there is *photophobia*, the room should be darkened. Great patience with the morbid irritability and sensitiveness is required. Beef-tea, strong broths, milk-and-soda-water, but no solid food, should be given. Cold water or other simple liquids may be freely administered. The patient's apartment should be well ventilated, and great caution exercised during recovery.

87.—Apoplexy (*Apoplexia*).

Definition.—A condition characterised by the abrupt loss, more or less complete, of consciousness, sensation, and power of voluntary motion, occasioned by extravasation of blood (*Hæmorrhage*) within the cranium.

Varieties.—(1) *Congestive* Apoplexy is an overloaded condition of the vessels of the brain, from determination of blood to the head. (2) *Hæmorrhagic* or sanguineous Apoplexy is the most frequent, and consists in the rupture of a vessel, and extravasation of blood into the substance of the brain, or outside the nervous masses. The symptoms are usually sudden, and development is most rapid. (3) *Serous* Apoplexy is the sudden effusion of serum in large quantities in the brain.

Modes of Attack and Warnings.—Apoplexy may come on *suddenly* or *gradually*. The patient may be suddenly struck—falling, at once bereft of motion and consciousness. Such a case is termed *Primary Apoplexy*. More frequently, however, Apoplexy is indicated by well-marked *premonitions*, which are, chiefly, Headache; giddiness, particularly on stooping; fulness and pulsation of the blood-vessels of the head; Epistaxis; retinal Hæmorrhage; sleepiness, with heavy or snoring breathing; transient blindness, flashes, motes, etc., before the eyes, considerable difference in the sizes of the pupils; deafness, or noises in the ears; momentary loss of consciousness, with or without indistinctness of speech or incoherent talking; vomiting, numbness, or tingling in the hands or feet; unsteady gait; partial Paralysis, sometimes involving the muscles of the face, sometimes those of a limb; the patient becomes comatose, and drowsiness generally increases to perfect *Coma*. This is called *Ingravescent* Apoplexy, because the symptoms become worse *gradually*, and is far more serious than a primary case, because we have evidence that the cause of the symptoms is still in operation, and because such a case is always hæmorrhagic, and the brain has undergone organic and permanent changes. On the other hand, a primary case may be a congestive variety, and the condition may pass off without any permanently injurious result.

Symptoms during Fit.—These vary according to the seat and amount of the Hæmorrhage, and are sometimes so vague that cerebral Hæmorrhage can only be suspected. The fit lasts from a couple of hours to several days, during which there is total unconsciousness; the pulse gradually recovers fulness, strength, and steadiness; the respiration is slow, uneasy, stertorous; the mouth secretes frothy saliva. Pain in the head, giddiness, faintness, sickness, labouring pulse, succeeded by some reaction, may alone be present. In the early stage of an *ingravescent* case, before the patient becomes comatose, there is great depression in the circulation from the shock to the nervous system; the surface is cold, pale, and clammy, and the pulse frequent, small, and weak. As Coma comes on, the pulse becomes full, slow, and laboured (passes slowly under the fingers); the surface warm, sometimes preternaturally so, and perspiring; the countenance has a peculiar bloated appearance, and is often congested; the eyes are glassy, the pupils insensible to light, and usually dilated, although one or both may be contracted; the breathing is stertorous from Paralysis of the soft palate; the teeth are clenched; deglutition is impeded; the urine is retained from inaction of the bladder, or involuntarily dribbles away; and the bowels are sluggish, or the motions are passed involuntarily.

One or several of the above symptoms may, however, occur as the consequence of indigestion. Vomiting and Headache are more important as indications when they come on suddenly without any obvious cause, and not on first rising in the morning; and the vomiting, or efforts at vomiting, are continued beyond the emptying of the stomach; if these symptoms are associated with degeneration of the arteries, and Albuminuria, we may suspect the existence of clots of blood in the brain.

Modes of Termination.—The comatose state may terminate by the recovery of the patient; by incomplete recovery with Paralysis of some part of the body, and debility of the mind, or by death.

Predisposition.—(1) *Age.* After fifty, Apoplexy is one of the most frequent causes of death. This arises not so much

from the years of a man's life, as from a bad constitution and tissue-depravation, not often present in early life. After the middle period of life, the capillaries become impaired, and, as a consequence, the veins congested. The arteries of the brain are often diseased; the heart has often acquired an abnormal power, driving the blood with great violence, and with an increased momentum, towards the brain, while the lungs have their functions so impaired that the blood is only imperfectly oxygenated; and all these are causes of Congestion, and of tendency to rupture of the vessels of the brain. (2) Intemperance, excessive eating or drinking, the use of aperient drugs, the act of digestion, sleep, the "change of life," uncontrolled passion, pressure about the neck, too close mental labour, or other habits of life that lead to cerebral Congestion. (3) *Disease* affecting the heart, kidneys, or blood-vessels of the brain; suppressed Hæmorrhoids, or menses.

Apoplexy not often suddenly fatal.—A popular opinion, to some extent shared by the profession, is current that an effusion of blood in the brain is a frequent cause of sudden death. In stories and theatrical representations the characters are made to die suddenly of Apoplexy; in newspapers, too, accounts are often given of sudden deaths attributed to it. This error has also been fostered by another equally common, namely, that persons with a short, thick neck and red face are most liable to Apoplexy. It is true that such persons often die suddenly, but the suddenness of the death is generally due to heart-disease. A man with a red face has no more blood in his head than another without a red face; and if blood is poured out into the brain it is because the diseased blood-vessel could no longer avert the fatal mischief. It is, then, a person with diseased arteries in whom Apoplexy is likely to occur, and this may exist in those who are pale and thin and have long necks. Dr. Wilks states that he once knew a gentleman who had such an extraordinary red face that some young friends disliked to walk the streets with him, lest he should die of Apoplexy. This gentleman, whose face was of a deep purple hue, died of heart-disease. "Although cerebral Hæmorrhage sometimes kills *rapidly*, it does not kill *instantly*, as rupture of the aorta, or heart-disease, sometimes does" (*Jackson*).

Causes.—The main cause of Apoplexy is disease of blood-vessels; hence the increasing liability to it with advancing age. The gradual degeneration or ossification of arteries common to old age renders them inelastic, and as the blood is forced on them by the action of the heart, they give way.* Hæmorrhage within the cranium is sometimes caused by the bursting of *Aneurisms* involving the arteries of the brain. The idea that increased pressure on the blood-vessels of the brain (as during exertion or rapid movement of the body) is an *originating* cause of Apoplexy is incorrect; there must be actual degeneration of the arteries, the process probably of years, before they can give way. The *predisposing* cause of Apoplexy is generally bodily unsoundness, which may be especially due to granular disease of the kidney, or Hypertrophy of the left ventricle of the heart. Apoplexy is almost always the local expression of a general constitutional failure.

Diagnosis.—*Apoplexy* is distinguished from *Epilepsy*, in that the latter begins with a scream, is always attended by Convulsions, and much frothing at the mouth; symptoms which do not occur in Apoplexy. In distinguishing it from *Intoxication* or *poisoning with Opium*, the history and circumstances of the patient must be considered. Is he likely to have been drinking? Is there an odour of spirits in the breath? Has he been low-spirited or in any difficulties likely to have led him to swallow poison? It is from such circumstances, considered in connection with the entire history of the case, that we must make our diagnosis, the condition of the brain, especially in the advanced stages, being nearly the same in all these cases. The importance of promptly diagnosing Apoplexy from alcoholic or narcotic poisons arises from the difference in the immediate measures that would be taken in the one or the other case. An emetic, or the stomach-pump, might remove in the one case what, if suffered to remain, might lead to serious or even fatal results; while in the other case wholly different measures would be necessary. It is obviously far better to mistake drunkenness for Apoplexy than Apoplexy for drunkenness, and when any one is found deeply insensible he should be carefully attended

* For a fuller account, see the Section on *Old Age and Senile Decay*.

under the direction of a medical man. Even if death could not possibly be averted, it is sad that a human being should die of cerebral Hæmorrhage in a police-cell. Under any circumstances, then, an unconscious person needs our care, for he may be so from a combination of causes; a drunken man may have had his blood-vessels ruptured by a blow on the head; or a drunken debauch may coincide with the breaking up of his cerebral arteries.

Epitome or Treatment.—

1. *For the premonitory symptoms.*—Nux V., Acon., Atr., Bell.
2. *Cerebral Hæmorrhage.*—Acon. (strong tinct.), Bell., Opi.
3. *After-consequences* (*paralysis, etc.*).—Acon., Bell., Phos., Cocc., Rhus.

Leading Indications.—

Aconitum.—Full, rapid, and strong pulse; dry, hot skin. This remedy is suitable for the *premonitory symptoms*, and for an actual attack, and both immediately and remotely is infinitely superior to the abstraction of ten, sixteen, or twenty ounces of blood; indeed, venesection has been proved by statistics to increase the mortality.

Belladonna.—Red, swollen face, throbbing of the blood-vessels, *conclusive movements* of the face or limbs, *dilatation of the pupils*, loss of speech, suppression or involuntary discharge of urine, etc.

Opium.—Drowsiness, *Cerebritis*, *Stupor*, or profound Coma; slow, full pulse; stertor and irregular breathing; *bloated face*, stupid and besotted expression, half-open eyes, contracted pupils; cold extremities.

Nux Vomica.—*Congestive* conditions of the brain favouring Apoplexy. Even when effusion has taken place it is often the best remedy unless active febrile symptoms call for *Acon.* *Nux V.* is particularly valuable for patients who have spent a *sedentary life*, and indulged in rich diet, wine, etc.

Phosphorus.—This remedy retards or corrects the *calcareous degeneration* of the arterial blood-vessels, which we have stated to be the great cause of the disease. It may be given when such a change is *suspected*, and also during recovery from a fit of Apoplexy from that cause.

Arnica.—Active congestion in old persons, threatened san-

guineous Apoplexy. *Cactus.*—Weight on vertex, or pressure on right side of the head. *Gels.*—Intense passive congestion, with nervous exhaustion. *Sang.*—Distention of the temporal veins.

ADMINISTRATION.—During a paroxysm, two or three drops of the tincture in a teaspoonful of water, or on a small piece of sugar, every fifteen or thirty minutes; in *threatened* Apoplexy, a dose every hour; as the symptoms are subsiding, every three to six hours.

ACCESSORIES DURING A FIT.—1. If possible, the patient should be conveyed immediately to a large apartment, where the cold air can freely circulate around him: 2. The neckerchief and bandages of every kind loosened, and the patient placed in a warm bed, with the head moderately raised. Warmth should be applied to the extremities and axillæ, and a cold wet towel, or crushed ice, in a bladder, to the head; also a sinapism to the epigastrium. 4. At the same time, one of the aforementioned medicines should be given, chiefly *Acon.*, *Bell.*, or *Opi.*

AFTER A FIT.—Should the patient recover from the fit, great and unremitting care must be observed to prevent another attack: The diet should be light, but nourishing; milk, light puddings, cooked vegetables, fish, etc., are extremely valuable; a full animal-diet should not be allowed till all fear of a relapse is passed; and stimulants should almost invariably be avoided. Moderate exercise of the muscles is a remedial agent of high value; it tends to promote a more active circulation through the entire system, and, consequently, to diminish the pressure on blood-vessels which a little extra force might cause to give way. If active exercise cannot be taken, frictions performed by a second person by means of towels or flesh-brushes over the surface of the body and the extremities are necessary. The causes of the disease should as far as possible be avoided or modified.

PREVENTIVE MEASURES.—Undeviating temperance in eating and drinking. Physical and mental exertion and excesses of every nature; fits of passion or excitement; sudden changes of temperature, over-heated rooms, warm baths, wet feet, etc.,

must be uniformly avoided. Errors in diet, exposure to a hot sun, violent emotions, etc., may excite the gravest symptoms in persons predisposed to Apoplexy.

88.—Sun-stroke (*Solis Ictus*)—Insolation—Sun-fever (*Coup de Soleil*)—Heat-stroke.

Definition.—A Paralysis of all the functions of the brain, occurring either gradually or suddenly, excited by heat, sometimes following exposure to the direct rays of the sun, particularly when to heat is added the pressure of tight and unsuitable clothing. Under the term Sun-stroke three different conditions, or diseases, have been included; *Phrenitis*, or acute inflammation of the meninges of the brain; *Heat exhaustion;* and *Thermic fever*, or true Sun-stroke. The first disorder is very rare; the second is distinguished by rapid feeble pulse, cool, moist skin, and a tendency to syncope; and the third is marked by intense fever, the temperature being 108° or 109°, with profound nervous depression, manifesting itself in the form of insensibility, restlessness, Convulsions, Paralysis and Asphyxia; symptoms which have been produced experimentally by heating the brain of the mammalia to 108° or 109°.

Symptoms.—These are sometimes insidious; the head is merely said to be queer, and there is listlessness and stupidity. But the affection is generally preceded by premonitory symptoms, such as thirst, heat, and dryness of skin; Vertigo; Congestion of the eyes; frequent desire to micturate; *Diarrhœa* in children, obstinate *Constipation* in adults; Syncope follows, and is often instantly fatal; or insensibility and stertorous breathing occur, with or without Convulsions. In both varieties the mortality is high, and excessive congestion of the lungs is the most common morbid condition found after death.

Causes.—Besides the direct effects, heat paralyses the sweat-glands of the skin, and the fatigue consequent on continued physical exertion in a heated atmosphere, combined with breathing vitiated air in crowded apartments, or close

hot nurseries, predispose to an attack. Hence its frequency amongst our soldiers who in eastern countries are exposed to great heat, carry heavy accoutrements, and often sleep in crowded barracks, etc. Attacks occur frequently during dentition, when the poisonous action of the over-heated blood is ignored, and the treatment is directed to the irritated condition of the gums, to the diarrhœa, or to the co-existing nervous irritability. Or the infant is supposed to be suffering from the initiatory symptoms of fever. "Two points are remarkable in the history of Sun-stroke, viz., its extreme rarity in mid-ocean, and at great elevations. In both cases the effect of the sun's rays, *per se*, is not less, is even greater, than on land and at sea-level; yet in both Sun-stroke is uncommon; the temperature of the air, however, is never excessive in either case "(*Dr. Parkes*).

Treatment.—The patient should be at once removed to a cool place, free from draught, and, *if there are no convulsions*, quickly stripped, placed in an empty bath, and have cold water poured over the neck and shoulders till the temperature is reduced below 102°. At the same time *Camphor* should be held to the nostrils; or, if the patient can swallow, one or two drops of the tincture should be given on a little crushed loaf-sugar. A teaspoonful of brandy-and-water in equal proportions may be substituted if *Camphor* should not be at hand. The danger once over, *Aconite* may replace the *Camphor*, giving two or three drops in a teaspoonful of water every ten minutes until the skin becomes somewhat moist and cool. When Convulsions occur, as is usually the case with children, the patient should be placed in a *tepid* bath, and cold water added, or even ice, till the heat of the body is diminished permanently to about 98°. *Aconite* should be administered as directed above, or, should the eyes be staring and glistening, *Belladonna* should be preferred.

Camphor.—Great depression of the pulse, and pale face, with violent distress in the head; followed immediately by a reaction—flushed face, accelerated pulse, etc.

Glonoine.—Very severe heavy and throbbing pain in the head, particularly at the back; or, sudden loss of consciousness.

Belladonna.—Violent dizziness, or sudden falling down as if from Apoplexy; redness of the face; delirium; glistening of the eyes, and sensitiveness to light.

Veratrum Viride.—Continued *Diarrhœa*, with heat of skin.

Hyoscyamus.—Persistent *Convulsions* and startings.

Helleborus.—Drowsiness and headache, continuing after the heat of the body is reduced.

Bryonia.—Nausea, vomiting and diarrhœa.

Cactus.—Every five minutes at first, the intervals being gradually increased.

Sequelæ.—The after effects of this alarming disease demand serious consideration. The skin, tardy in resuming its functions, may be brought into activity by bathings, and subsequent frictions; obstinate constipation may be combated by *Opium* or *Bell.*; headache by *Glonoine*, *Helleborus*, or *Hyoscyamus*; and loss of memory by *Woorara.* Convalescence may be retarded by deranged secretions, continued fever, pulmonary disorder or great prostration, which must be dealt with as they arise. Epilepsy, Paralysis and Insanity, which sometimes follow in the wake of Sun-stroke (many months, perhaps, after apparent cure), being due to more profound disturbance of the nerve-centres, require the utmost care and skill. Good may, however, be derived from the administration of *Bell.*, *Hyos.*, *Cup.*, *Stram.*, *Nux V.*, or *Zinc.*, according to the indications.

Accessory Means.—It is now generally agreed that Sun-stroke follows from a depressed, and not, as was formerly taught, from a stimulated condition of nervous centres. The treatment, therefore, by the lancet, which a few years since was the orthodox method, and supposed to be strongly "indicated," has been generally abolished, and that by cold douche, cold compresses constantly applied over the head, neck, and chest, or evaporating lotions to the head, is almost universally adopted.

Prevention.—Clothes should be light and loose, especially avoiding undue pressure on the veins of the neck. *Flannel* tends to prevent chills. Spirit-drinking, particularly in India and other hot climates, should be discontinued, as it undoubtedly predisposes to attacks.

89.—Chronic Hydrocephalus (*Hydrocephalus longus*)—Dropsy of the Brain—Water in the Head.

Definition.—A local dropsy consisting of a collection of serous fluid within the cranium, which may be congenital or acquired. Sometimes the dropsy is the precursor, sometimes the consequence, of Tubercular Meningitis, and is then called Acute Hydrocephalus. When, however, it is congenital, or is the slow result of constitutional cachexia, it is known as Chronic Hydrocephalus.

It generally occurs within the first year, before the sutures and fontanelles are closed, so that the bones yield to pressure from within. Infants are sometimes born hydrocephalic; in which case the abnormally large head causes difficult labour. Instances of the disease attacking children in the seventh or eighth year have been reported, and in some extremely rare instances the disease has at first appeared at a more advanced age. Dr. Watson mentions the case of a distinguished young lawyer, who had one or two attacks of loss of consciousness while engaged in the Court of Chancery; by degrees he became dull, forgetful, insensible, and shortly died from watery fluid within the skull. The celebrated Dean Swift died of this complaint at the age of seventy-eight, three years after the commencement of the disease. In these instances, after the sutures are closed, the bones cannot yield to pressure, and the size of the head is natural; the collected fluid therefore distends the cavities within the head, and causes an anæmic and wasted condition of the brain-substance. In children the bones of the skull are separated, sometimes to an enormous extent, so that the head, distended with fluid, has been known to measure twenty-four, thirty-six, and even thirty-nine inches in circumference. The head is irregular in shape, and somewhat flat on the top; occasionally it assumes a sugar-loaf shape, or a bag of fluids hangs behind.

Symptoms.—The *premonitory* indications of this disease are not very distinctive: there may be squinting or rolling of the eyes if the disease be congenital, followed by Convulsions and enlargement of the head.

The most marked features are—the disproportion between the size of the skull and that of the face, the width of the fontanelles, and the thinness of the bones under pressure of the fingers. Emaciation is generally present through non-nutrition; in some cases there is an unnaturally fat condition. If an infant, he sucks well, even voraciously, and yet he does not grow; his bowels are constipated, and his motions unhealthy. The gradually-increasing head soon attracts notice; the anterior fontanelle pulsates, there is heat of the head, it droops helplessly on one side, and the child becomes very restless. Fluctuation may be felt by applying the hand to the top of the head; the hair ceases to grow as usual; the face appears small and triangular; the countenance is dull, having an aged appearance; and the patient is continually wishing to lie down. The child grinds his teeth, rolls his eyes, manifests feeble intelligence, irritability and peevishness, is morbidly sensitive to light, noise, and movement. In unfavourable cases, the senses become impaired; Paralysis sets in; and the patient dies from exhaustion, Convulsions, or Spasmodic Croup, to which such children are liable.

The duration of the disease varies from one to eight, or even ten years. Should effusion be arrested, the accumulation of serum already secreted remains, for it is never absorbed.

Causes.—Chronic Hydrocephalus is usually associated with the scrofulous cachexia; sometimes it follows Scarlatina, Hooping-cough, or Measles. The most common exciting causes are—undue exposure to heat or cold, injuries of the head, suppressed eruptions, or extended Inflammation of the ear. "One warning may be learned from this disease," writes Dr. Aitken, "namely, that it is said to be most common in the children of parents addicted to drunkenness, and from this cause it often runs in families."

Treatment.—The best remedies for this disease are those adapted to the constitutional cachexia: these are—*Calc.*, *Sulph.*, *Ferr.-Iod.*, *Sil.*, etc., fuller indications for which will be found in the Section on "Scrofula."

Bell., *Apis.*, *Ars.-Iod.*, *Hell.*, *Dig.*, or *Merc.*, may be required as adjuncts.

Leading Indications.—*Calcarea Carb.*—Strumous, weakly

children; joints large, bones soft and curved, teeth delayed or decayed, nutrition defective.

Silicea.—Tendency to Abscesses, *perspiration of the head,* and a general condition resembling the above.

Ferrum Iod.—A puffy, flabby state of the system, enlarged glands, hard abdomen, pale, *earthy* complexion.

Sulphur. — Tedious cases; skin dry, or covered with various eruptions.

Helleborus.—Head very large, or enlarging fast. Acute symptoms.

Digitalis.—Urine scanty or suppressed, circulation feeble; particularly suitable for the children of drunkards.

Apis.—Post-scarlatinal; urine scanty, œdematous throat.

Belladonna.—Convulsions, and other acute symptoms.

Mercurius.—Syphilitic cachexia.

Arsenicum Iod.—Tubercular cachexia; enlarged abdominal glands, cough, inanition, prostration.

A more recent authority gives the following epitome of treatment:—"*Bry.*, face flushed, or alternately flushed and pale, fontanelle open and projecting, slightest attempt to move child makes him cry; *Phos.*, spurious, arising in children from exhausting diseases, as diarrhœa; *Zinc.-Mur.*, should *Phos.* not suffice."

The *Accessory Treatment* is the same as that recommended for Scrofula. The most important points are—fresh air, out-of-door exercise, Cod-liver oil, and nourishing food. See also on "Infantile Convulsions," and "Acute Hydrocephalus," Secs. 93 and 73. Tapping the skull is admissible in some cases.

Prevention.—Dr. Von. Grauvogl states that in families in which hydrocephalic children have been born, he has succeeded in preventing recurrence of cases by single alternate daily doses of *Sulph.* 6, and *Calc.-Phos.* 6, given to the mother during the term of pregnancy.

90.—Paralysis (*Paralysis*)—Paralytic Stroke.

Definition.—Paralysis, or Palsy, is a condition in which there is loss of motor power to a variable extent, associated

with disease of the brain or spinal cord, from injury to, or pressure upon a nerve-trunk, or from the action of a poison.

General Causes.—The different forms of Paralysis may be occasioned by (1) disease of the brain, arising from Apoplexy, minute hæmorrhages, softening, induration, tumours; (2) disease of the spinal cord, arising from inflammation, atrophy, renal disease, loss of continuity; (3) disease of the investing membranes, causing pressure on the brain or nerve, or simple lesion of the nerve which impairs its conducting power; (4) Epilepsy, Chorea, Hysteria, Diphtheria or Rheumatism; and (5) the influence of poisons.

Muscular Conditions.—The different muscular conditions in Paralysis are (1) less firmness than in health, less response to the galvanic stimulus; (2) complete relaxation as manifested in softness, imperfect nourishment, rapid atrophy and want of response to the galvanic stimulus; (3) contraction, with rigidity and wasting; (4) firmness, rigidity, full nutrition, susceptibility to the galvanic stimulus, but partial loss of power.

There are many different forms of Paralysis, some of which, with their chief causes, are as follows:—

Hemiplegia—the most common—is that form of Paralysis in which one lateral half of the body is affected from disease of the opposite half of the brain, the parts generally involved being the upper and lower extremities, the muscles of mastication, and the muscles of one side of the tongue, when the patient is said to have had a "paralytic stroke." The left side is more frequently affected than the right; if only one extremity suffer, it is usually the arm. The motor power may be either complete or incomplete, but the respiratory function is not impeded. The cheek on the palsied side falls loosely, the angle of the mouth is drawn upwards, the point of the tongue when protruded turns towards that side. Articulation is imperfect, sensation is more or less impaired, the mind is sometimes clear and vigorous, but in most cases irreparably damaged. Memory is weak, emotions are easily aroused, distress is shown respecting little matters, tears are soon shed. The limbs gradually waste, their temperature is lowered, they are less able to resist the influence of cold and

heat than the healthy limbs, and therefore require special care; ultimately they become atrophied.

Hemiplegia may, however, be very partial, as when it affects the third nerve only, causing dropping of the upper eyelid, to which that nerve sends branches, so that it cannot be raised except by the hand. This condition is termed *Ptosis*. The eye is also sometimes turned outwards or inwards (*squinting*) from a similar affection.

The chief *causes* are—cerebral Hæmorrhage (*Apoplexy*), obstruction of the blood-vessels of the brain, and consequent cerebral softening. The general pathology and treatment are the same as pointed out in the Section on Apoplexy.

Paraplegia is a form of Paralysis, more or less complete, of the *lower half* of the body, in which the legs, and perhaps also the muscles or the rectum and bladder, are implicated. It is caused by disease of the spinal cord, or of its membranes, or of the vertebræ, so that the cord is either pressed upon or disorganised. It may also arise as one of the symptoms of chronic cerebral disease.

There are two kinds of Paraplegia—*Reflex*, due to some excitation of the spinal cord from a sensitive nerve, and associated with injury or disease of organs remote from the spinal cord: and *Myelitic*, due to inflammation of the substance of the spinal cord. In *Reflex Paralysis*, Dr. Brown-Séquard believes that the disorder is accompanied, and perhaps produced, by an insufficient supply of blood to the cord. There are, however, no special symptoms of organic disease. Dr. Meryon, making reference to the proximate causes of the disorder, describes several forms of *Reflex Paralysis* as Emotional, due to Pregnancy; Neurolytic; from the irritation of Worms; from the irritation of Teething; Urinary; from Uterine disease; and from mechanical injury. The importance of observing these distinctions is, that the practitioner may apply remedial measures to the proximate cause of the Palsy if he hope to relieve the consequent disorder. If, instead of diminished nutrition of the cord, there be increase in the amount of blood, as in chronic local Myelitis, causing congestion or inflammation of the cord or its membranes, then this special condition will demand

particular attention. Its symptoms are convulsions, cramps, twitchings, erection of penis, and other indications of irritation of nerve fibres.

The usual manifestation of Paraplegia is slow and insidious; there is weakness, numbness, creeping and tingling of the feet and legs, followed by increased weakness, with loss of sensibility and motor power. The patient is obliged to remain in the recumbent posture, bed sores are formed and ulcerate; the bladder and sphincter ani are paralysed; the urine becomes decomposed, ropy, fœtid, and alkaline: and there is manifest deterioration of the general health. But though there is no voluntary motion of the lower limbs, involuntary and spasmodic movements are common, and prove very distressing; the consequence is that sleep is disturbed, and the whole nervous system is enfeebled.

Locomotor Ataxy (*Tabes Dorsalis*) is a disease of the posterior columns of the spinal cord, attended with loss of power of co-ordinating movements, causing unsteadiness of gait; there may be perfect muscular power, but progressive loss of voluntary and instinctive controlling power. The symptoms of this diseased condition have been arranged in three series. First: temporary loss of power in one of the motor nerves of the eye, disordered vision, paroxysms of neuralgic pain, Spermatorrhœa, Impotence. Second: difficulty in standing or walking with steadiness, loss of sensibility, incontinence of urine, constipation. Third: all preceding symptoms are aggravated, and loss of power becomes general. The inability to control the limbs is not unfrequently the consequence of severe cerebral diseases, of fevers, of poisoning by Belladonna, tobacco, alcohol, etc., and of excesses. Cure is very rare; a fatal result may, however, be postponed.

Infantile Paralysis is a form which occurs almost exclusively at the time of dentition, from the age of six months to three years. The evidence is in favour of its being originated by special inflammation or congestion, and confirmed by hyperæmic softening and atrophy of the antero-lateral columns. It may come on suddenly, or be preceded by convulsions; it may be manifested on a group of muscles, in a single limb, or be

less localised; it may be hemiplegic or paraplegic. There is loss of power, numbness, not much loss of sensibility nor of contractility. Sometimes the Paralysis disappears in a day or two, in other cases is stationary and permanent. In these cases, though there is no danger to life, there is no absolute hope of cure, but a more or less deformed or withered limb remains. Recovery is, however, not infrequent.

Local Paralysis.—(1) *Facial Paralysis.*—This is due to pressure on, or injury to, the *portio dura*, or facial portion of the seventh pair of nerves, or to a cerebral lesion acting on the nerve, or to reflex Paralysis of the seventh pair. The "muscles of expression" are alone affected, and on one side, so that the symmetry of the countenance is destroyed, and the profile on the palsied side is without expression. All the functions of the buccinator muscle (mastication as well as expression) are interrupted; hence, the patient generally first discovers his disorder when he begins to eat. There is no pain, but difficulty of mastication, needing the pressure of the hand to push the food between the teeth when it gets between the cheek and the gums. The mouth is also drawn awry, especially in the act of laughing. When speaking or laughing the angle of the mouth is motionless, so also are the eyelids, while the eye of the affected side is rather more open than the other. Sight is unimpaired, the tongue is unaffected, but the articulation of some words formed by the lips is difficult. The disorder is usually caused by exposure to cold, or by debility; it may last from a few days to a few months; but will usually get well in time with appropriate treatment.

(2) *Scrivener's Palsy* is a paralysis of the motor fibres of the nerves of certain muscles of the fingers and thumb, occasioning a loss of controlling and co-ordinating power, so as to prevent writing, painting, sewing, etc. The penman is not the only sufferer; the artist and handicraftsman share in the privation. The pathology is unknown. The first indication is stiffness of the muscles, with sense of fatigue of the hand, leading to a tighter grasp of the pen or pencil. Rest relieves it; but if rest be not continuous till the muscles acquire tone, spasms supervene, the movements of the hand become unsteady, and the thumb and fingers are contracted.

Progressive Muscular Atrophy, or Wasting Palsy, is an idiopathic degeneration of the voluntary muscles. It is not determined whether this is really a disease of the muscular texture itself or of the spinal cord. In some instances the muscles undergo fatty degeneration without change in bulk, in others they simply waste away; they are always voluntary muscles. The disease creeps on unawares, and is first observed by a loss of power. In most cases it commences in the upper limbs—the hand, often the ball of the thumb. Convulsive twitchings or quivering of individual muscles are early symptoms. Transient pain is also common. The weakness increases daily though slowly; lassitude supervenes; the atrophied member is seen to be wasted when compared with its fellow; and at last the Paralysis is complete. So long as it is confined to the limbs there is hope of arrest; if the trunk be invaded, the prognosis is unfavourable, for then it is invariably fatal. As a rule, tactile and common sensibility, intellectual power, organic functions, and general health remain unimpaired till towards the end, which may occur in a few months, or be deferred for many years. With regard to the cause of this form of Paralysis, it is unquestionably hereditary; it has also ensued from exposure to cold and wet, from very hard work, from fever, sunstroke, falls, and blows on the back of the head or spine.

Other forms of paralysis may be named: *General Paralysis*, or Paralysis of the insane; *Hysterical Paralysis*, affecting hysterical women, traceable to fright, over-excitement, ovarian irritation, loss of blood, and especially to imperfect nutrition; Rheumatic *Paralysis*, attacking either of the upper or lower extremities, etc., due to rheumatic irritation or inflammation of some of the membranes of the spinal cord; *Diphtheritic Paralysis*, a loss of power of swallowing consequent on Diphtheria; *Mercurial Palsy* or convulsive tremor of the hands, occasioned by exposure to the fumes of Mercury; *Lead Palsy*, in which the extensor muscles of the hands and fingers are paralysed and the "wrists drop," caused by lead poisoning; and *Paralysis Agitans*, or Shaking Palsy, an involuntary tremulous motion, with lessened muscular power, in parts of the body not in action —a continuous shaking of the hands, arms, head, or entire body.

EPITOME OF TREATMENT.—

Hemiplegia.—Bary.-Carb., Nux V. (*rigidity*), Cocc., Arn. (*especially of the left side*), Acon., Atrop. (*of the tongue, bladder, etc.*)

Paraplegia.—Cocc., Strych., K.-Brom., Phos., Arg.-Nit., Plumb., Rhus, Caul., Kali-Hyd. (*uterine*).

Locomotor Ataxy.—Phos., Bell., K.-Brom., Arg.-Nit. Ars.

Infantile Paralysis.—Gels., Bell., Sec., Dulc., Plumb., Localised Galvanism.

Facial Paralysis.—Acon. or Acon. alt. Gels. (*recent*); Bary.-Carb., Caust. (*from exposure of face to cold or damp*); Bell., Kali-Chlor., Graph.

Paralysis of the upper eyelid (*Ptosis*).—Gels., Spig., Bell.; Stram.

Scrivener's Palsy.—Rhus, Strych., Arn. Prolonged rest of the affected muscles.

Wasting Palsy.—Phos., Plumb., Bell.

General Paralysis.—Phos., Can.-Ind. (*from degeneration*); Bary.-Carb. (*of old persons*); Merc.-Cor., Cocc.; Coni., Bell. (*after Apoplexy*); Plumb. (*with wasting or obstinate Constipation*); Arg.-Nit., Gels. (*Muscular Paralysis*).

Hysterical Paralysis.—Ign. (*especially from fright*), Hyos., Bell., Cocc.

Rheumatic Paralysis.—Rhus, Acon. (*recent*); Arn., Strych., Sulph. (*chronic*).

Diphtheritic Paralysis.—Gels., Phyto., Ign., Coni., Rhus, Strych., Curare.

Lead or Mercurial Palsy.—Opi., Iod., Cup., Ars. "Alumen, Persistent faradisation, a weak current three times a day. The patient must persevere in attempts to use his muscles."

Paralysis Agitans.—Merc., Hyos., Tarantula.

"*Local.*—Plumb. (*Drop hand or drop foot, when not due to lead poisoning*); Cocc.-Ind. (*paralysis of muscles of neck, head cannot be supported*); Physostig. (*of the sphincters*); Gels., Cupr. (*writers' cramp*).

Of Larynx.—The use of electricity must be taken advantage of in most local paralyses. In lead poisoning, a gentle faradic current, and in writers' cramp, the continuous current must be used persistently; massage, and active and passive movements should also be used.

Paraplegia.—Hyperic, and as a liniment (*from accident*); Ac.-Oxal. (*with rigidity, spasm*); Kali-Iod. (*if other remedies fail*).—*J. H. Clarke.*

Leading Indications.*—*Aconite.*—*Recent Paralysis*, especially facial, and other local forms of the affection, *consequent on cold;* sensation of numbness in the back, extending to the lower extremities; stinging and pricking in the arms and fingers, and other symptoms resembling the toxicological effects of the drug. Hempel regards *Acon.* as possessing extraordinary curative powers in Paralysis, and has treated a large number of cases —local and general—by means of the saturated tincture with complete success.

Phosphorus.—Paralysis from *degenerative changes in the brain and spinal cord*, following sexual excesses, or debilitating diseases, with fatty degeneration of the muscles. It is specially indicated in Paralysis of *spinal origin*, as from softening of the anterior columns of the cord, with sexual excitation first, and Paralysis and Impotence afterwards.

Nux Vomica.—Paralysis from disease of the spinal cord, consequent on the *abuse of alcohol*, with *anorexia, sickness, constipation*, and other conditions indicating this drug. The strong tincture should be given, or, in advanced cases, *strychnia*—3x or 4x trit.—may be substituted.

Plumbum.—General or partial Paralysis with excessive *wasting* of the muscular tissues, *obstinate constipation*, and other symptoms resembling those produced by lead.

Rhus Tox.—*Rheumatic Paralysis*, from repeated exposures to wet, strains, or excessive exertion, with *painful stiffness, tingling*, or *numbness;* pains are especially felt on movement after rest, and on rising in the morning.

Opium.—Paralysis of the *brain*, especially in old persons and drunkards, with constipation or stools of *hard, black balls*, retention of urine, and general *torpor*.

Baryta Carb.—Incomplete general Paralysis of the aged, with loss of memory, trembling, etc.; facial Paralysis; Paralysis of the tongue.

* Other remedies than those for which the following leading indications are given, may be found equally useful in some cases, as suggested in the previous epitome of treatment.

Accessory Means.—1. *Electricity*, or *galvanism*, judiciously employed, is a valuable remedy at our disposal for wasting of the muscles, deformities, and other forms of *local* Paralysis after the acute inflammatory symptoms have subsided. Although it cannot renew nervous tissue that has been destroyed, and is inapplicable to some of the most severe forms of Paralysis, it may do much to give tone to the nerves if it be suitably applied. At an early period of Hemiplegia, it may correct the tendency to cramp, and the late rigidity. In Paraplegia, it must not be applied when there is active inflammation, and it will be useless if there be no muscular response to the current. In any form of Paralysis so long as there is response there is some hope of conferring benefit; if, then, the disorder be long and tedious, the treatment will be long and tedious too, but should, nevertheless, be persevered in. In the Paralysis of mercurial or lead poison, resort to electrical treatment should be prompt, lest the atrophy should reach an irremediable point. In Paralysis that has been brought on by cerebral disease, or that has come on suddenly, or that is characterised by giddiness, pain, weight, or fulness of the head, great care must be taken not to employ it too soon, say for several months. Care should also be observed not to agitate patients by a great show of the apparatus, or by the mode in which it is used; for their nervous system is in most cases sensitive to excitement. 2. *Bathing* is important. The cold *douche* directed to the spine, or bathing with salt water, or, if the patient be capable of the effort, sea bathing, tends to promote the nutrition of the spinal cord. 3. The bath should be followed by steady and persistent *friction*, up and down the spine and along the paralysed limbs. In Rheumatic Paralysis *shampooing* has effected striking cures. A healthy action of the skin is greatly promoted by free ablutions and frictions, which are the more necessary because the patients cannot always take the exercise which promotes free perspiration. 4. *Regulated Exercise*—active when the patient is capable of it, passive when he is not—is of great value in overcoming muscular rigidity, and restoring the functions of paralysed limbs. The limbs should be repeatedly flexed by the hands of another person, so long as the movements can be borne. 5. The application of *ice* to the spine is valuable in some paralytic conditions.

In Hemiplegia the mind should be kept tranquil; in Reflex Paralysis the proximate cause of the symptoms should be sought out and corrected; in the wasting forms of paralysis the treatment should include increased nutrition; affected limbs should be kept warm, and the right exercise of the functions carefully preserved.

91.—Tetanus (*Tetanus*)—Lockjaw.

Definition.—A disorder characterised by a contraction or spasm of voluntary muscles, general or partial, alternating with relaxation more or less complete, arising from an excited state of the spinal cord and medulla oblongata.

Causes.—Tetanus may be *idiopathic*—from some disorder of the blood or nervous system; or *traumatic*—from a wound which produces local nervous irritation; this is by far the most common cause. The extraction of a tooth has caused this disorder under the author's own observation. Sudden atmospheric changes seem to have considerable influence in producing the disorder. Happily, it is not very common, though it is very formidable and dangerous. It may occur at all ages, but is most fatal in young persons under ten years of age, and least fatal between the ages of ten and twenty. Males are more liable to it than females. Traumatic Tetanus usually supervenes between four and nine days after the injury, and these cases are the most fatal. If it occur after nine days from the injury, or if the symptoms persist for fourteen days without a fatal issue, the prognosis is favourable. Tetanus in the puerperal state is the most fatal.

Symptoms.—There may be premonitory indications of an attack, such as fear, or sense of impending danger, or a disturbed state of the digestive organs. But the unmistakable symptoms soon appear, namely, stiff neck, sore throat, followed by inability to open the mouth fully (*Lockjaw*); difficult deglutition; painful expression of the countenance, convulsed or fixed features, the corners of the mouth being drawn up (*risus sardonicus*). When fairly set in, the Spasms of the voluntary muscles are of the most violent character, with much pain and partial remissions. The pain is of that kind which attends

ordinary Cramp in the muscles, as of the legs, and is usually very severe. The breathing becomes loud and sobbing; if the muscles of the trunk are affected the body is jerked forward (*emprosthotonus*), or backwards (*opisthotonus*), or is perfectly rigid (*tonic Spasm*), like a piece of wood. The mind continues clear, and when death ensues it is from exhaustion consequent on the frequency of the tetanic Spasms (*Erichsen*).

Epitome of Treatment.—

1. *Idiopathic Tetanus.*—Acon. (*from exposure*); Cham. or Cin. (*from worms*). When arising from injury, another authority recommends that the wound should be dressed with *Calendula lotion* [ʒiv–ʒviii].

2. *Traumatic Tetanus.*—Nux V. (or Strychnia), Acon., Bell., Ac.-Hydroc., Arn.; Atrop., K.-Brom.; Lach.

The remedy should be given in a low dilution, and administered every few minutes as soon as the first indications are noticed. The application of ice along the spine affords relief. Surgical measures are sometimes necessary.

92.—Hydrophobia* (*Hydrophobia*)—Rabies.

Definition.—A disease caused by inoculation with the virus of Rabies, generally resulting from the bite of a mad dog, or from its licking an abraded portion of the skin; the chief characteristics of which are,—severe constriction about the throat; spasmodic action of the diaphragm; a peculiar difficulty of swallowing, and consequent dread of fluids; anxiety and restlessness, followed by exhaustion, delirium, and death.

Symptoms of Rabies in the Dog.—According to Youatt, the earliest are,—sullenness, and frequent shifting of posture; loss of appetite; lapping his own urine; disposition to lick cold surfaces, to eat straws, *excrementitious* matter, and other rubbish; and fighting with his paws at the corners of his mouth. Snappishness, especially at other dogs, and without provocation, or (if at large) sullen, unobservant, undiverted course along the street, are suggestive signs. A very early and con-

* See *H. World*, vol. xxiv. pp. 350, 437; vol. xxv. pp. 7, 50.

stant symptom is *change of voice*, every sound uttered being more or less changed.

The amount of *ferocity* varies; some show extreme fondness; while others bark and rush to the end of their chain to meet an imaginary foe; or, if loose, rush out, biting every one they meet. There is *no dread of water*, as in human beings, but, on the contrary, great thirst; and the saliva becomes viscid, and adheres to the mouth. In the last stages of the disease, the eyes become dull; the hind legs, and afterwards the muscles of the jaw, are paralysed; and the animal dies exhausted in from four to six days. Next to the dog, probably the wolf, the fox, the jackal, and the cat, are most liable to Hydrophobia. Common and vulgar *errors* are that no dog is mad which will lap water, that the animals only go mad in the dog-days, and that the female dog is not liable to the disease.

Symptoms in Man.—These are not manifested till a period after receiving the infection varying from a few weeks to one or two years, the wound having probably healed, and the scar presenting no remarkable appearance. Twitching and itching sensations are sometimes felt in the vicinity of the wound prior to an attack. Sometimes there is stiffness, or numbness, or partial Palsy; or the wound may be red and swollen; there is an indistinct feeling of uneasiness and anxiety, with giddiness, chills, heats, and a general feeling of being unwell. The special symptoms are arranged by Mr. Erichsen under three heads; consisting (1) of a *spasmodic affection of the muscles of the throat and chest:* the act of swallowing commonly exciting convulsions, makes the patient afraid to repeat the attempt; hence the horror of all liquids is so remarkable a feature of the disease. (2) *An extreme degree of sensibility of the surface of the body.* (3) *Mental agitation and terror*, which frequently mark the disease throughout. To these symptoms we may add extreme thirst; the secretion of a remarkable viscid saliva, the effort to swallow which brings on the convulsive fits; the Convulsions increase in frequency and violence; the lips and cheeks become livid, and perpetually quiver; till, at length, one fit lasts long enough to exhaust the remaining strength.

CAUSE.—A bite from an animal already affected with Rabies.* It is asserted and generally believed in India, that Rabies never originates in dogs, but can always be traced to a mad jackal or wolf entering a village or town, and biting the dogs. Close confinement, want of fresh water, unwholesome food, etc., may have some influence in developing the malady.

PATHOLOGY.—Dr. Kudnow, of Russia, Professor of Pathological Anatomy, declares the brunt of the disease to be borne by the kidneys, the lobes of which undergo fatty degeneration, and the parenchyma destructive inflammation.

TREATMENT.—*Immediately* after a person has been bitten by a suspected animal, the wound should be sucked with all the force the patient can command; and if he is too much alarmed or otherwise unable to do it himself, a friend should do it for him.† As soon after this as possible, a surgeon should excise ‡ the wounded part, care being taken to remove every portion touched by the animal, and to obtain a clean raw surface. The wound must then be washed by a stream of warm water, and, afterwards, the *Nitrate of silver*, or pure *Carbolic Acid*, freely applied. But, after all, the best prophylactic is the actual cautery with red-hot iron. To burn out the bitten part with a red-hot poker or Italian iron is little, if at all, more painful than to treat it with lunar caustic, or the more severe mineral escharotics. The hissing metal is more terrible in the show than in the reality, and if freely applied, it is almost certain to confer absolute immunity. Should the wound be deep, or in a part of the body where an operation is difficult, the knife should first be freely used, and then the cautery

* "The susceptibility of the human subject to this poison is by no means universal, for only ninety-four persons are known to have died out of one hundred and fifty-three bitten, making the chance of escape nearly as three to two" (*Aitken*).

† No danger attaches to the person thus sucking the wound, so long as the poison does not come in contact with any abraded or otherwise imperfect surface of the mouth or other part of the body.—*H. World*, vol. vii. p. 287.

‡ Youatt objected to *excision*, because he said the point or blade of the instrument used was apt to be touched by the virus, and thus infect the sound parts. He recommended the free use of caustic, which decomposed the virus, and formed a sort of cake enveloping it. He had himself been bitten many hundred times by rabid dogs without infection, having always used caustic; nor did he think it scarcely ever too late to take this precaution.

applied to the cut surface. Dr. Buisson recommends the *Vapour* bath. He states that he attended more than eighty persons bitten by mad animals, and did not lose a single case. He even took the virus himself in order to observe the symptoms, then, having become so affected that he could observe and write no more, he entered the bath, deeming himself too far gone for recovery. However, he was cured. He recommends the bath to be taken for seven successive days—*à la Russe*—at from 57° to 63°.

The chief Homœopathic remedies are :—*Belladonna*, *Stramonium*, and *Scutellaria Lateriflora*. These medicines are on no account to supersede the local means just pointed out, but are to be used as additional preventives, or as palliatives.

Belladonna, according to Hahnemann, is the most sure preventive; and certainly no other drug has the power of simulating Hydrophobia to the same extent. Several very interesting cases of genuine Rabies, said to have been cured by this drug, are quoted in Hempel's "Materia Medica."

Scutellaria.—In the "New Remedies," Dr. Hale proves that this drug has caused nervous derangements similar to those of Hydrophobia, and cites cases of cure of the disease by this remedy.

Euphorbia Villosa.—This remedy is said to be specific in doses from 5 to 30 drops. The internal and external use of a solution of *Arsenic* (Fowler's) has been advised.

Dr. Aitken shows that after experimenting with nearly two hundred different drugs, in massive doses, *scientific medicine* has signally and totally failed, and adds: "All that remains is to mention the most leading experiments, with the hope that, as they have not been successful, they may not be wantonly repeated. . . . In all probability no prophylactic medicine exists in nature, and the administration of any potent substance by way of prevention is worse than useless."

It is refreshing to contrast the above with Hughes' remarks in his "Manual of Therapeutics." After referring to the cases cured by *Belladonna*, he says: "I think you will feel inclined, if any one whose life you value has been bitten by a suspected dog, to keep such an one under the influence of *Belladonna* until the utmost limit of incubation has been reached. . . .

And if *Belladonna* has cured a single case, it has done more than all the resources of traditional medicine have been able to accomplish."

PRECAUTION.—After a person has been bitten by a *suspected* dog, the animal should on no account be killed, for, after all, it may turn out that it was not really mad. By shutting it up and allowing it to live, the non-malignant character of the affection may be ascertained, and the patient's mind relieved of a most harassing fear, that might otherwise have tormented him for months or years. The fact is, Rabies seldom attacks the dog; a considerable proportion of persons bitten by rabid dogs have escaped all symptoms of disease, and few persons die from Hydrophobia. It may also be consolatory to some persons to know that when the dog bites through clothes, especially woollen material, the poison is absorbed by the clothes; and that many dogs that snap and bite are only vicious not mad. Dr. Gibbons is of opinion that many deaths attributed to that disease have been the result of strong and continued mental excitement. The terror inspired by the bite of a dog suspected of Rabies working upon a nervous temperament easily brings on "convulsions and other extreme manifestations allied to the symptoms of canine madness."

MORTALITY.—The compulsory muzzling of dogs in certain districts came into force January, 1890, and according to official returns for the year showed a large decrease in the number of cases of Hydrophobia, there being only eight deaths, and of these there were but two cases in London. The deaths from this disease, which had been 30 in the preceding year, 1889, and had averaged 24 annually in the three years, 1887–8–9, fell away, as we have already said, to eight in 1890, being fewer than in any year since 1868.

93.—Infantile Convulsions (*Membrorum distentio infantilis*)—Fits of Infants.

DEFINITION.—Infantile Convulsions are the most frequent of the cerebral affections of children, and usually arise from some eccentric cause, as teething, but sometimes are forerunners of Hydrocephalus. In children, a Convulsion generally takes the

place of the rigor that occurs in adults at the commencement of acute diseases.

Symptoms.—In slight cases, the child suffers from twitchings of the muscles of the face, some difficulty of breathing, rolling of the eyes. In severe cases he suddenly becomes insensible, and the muscles of the head, neck, and extremities are convulsed; the eyes are insensible to light, and turned rigidly up and to one side; the face is usually congested, but sometimes pale; the lips are livid, and there is frothing at the mouth; the hands are generally firmly clenched, and the thumbs turned inward, with the fingers on them; the feet are turned together, with the great toe bent into the sole, from the greater irritability of the flexor muscles. After one or two minutes, the Convulsions cease, either altogether, or for a short period. The slighter attacks are common to new-born infants.

Causes.—Irritation of the brain from pressure of a tooth upon an inflamed gum, or anything which over-excites the nervous system; disease of the brain; an insufficient supply of blood to the brain, as in badly-fed children; improper food, which acts as an irritant; an impure supply of blood, as in the eruptive fevers; the irritation of worms; fright; powerful emotions of the mother; suppressed eruptions; Indigestion. The remote causes are, hereditary constitutional taint, too early or too late marriage of the parents, etc.

Treatment.—*Belladonna.*—Convulsions with determination of blood to, or Inflammation of, the brain, *hot*, *flushed face*, especially in stout children, who start suddenly in sleep, and stare wildly. Two drops of the tincture in a teaspoonful of water should be given early, and repeated every fifteen minutes for several times.

Chamomilla.—Spasmodic twitchings of the eyelids and muscles of the face, one cheek red and the other pale. It is especially suitable for irritable children, and in fits from Indigestion. True brain-symptoms require *Bell.*

Opium.—Convulsions from *fright*, followed by *stupor*, with snoring, or laboured breathing, dark red or purple, hot swollen face, upturned eyes, insensibility to light, confined bowels, and suppressed urine.

Cuprum.—Red, bloated face, shrieking before an attack, which resembles an epileptic seizure.

Bryonia.—Repelled eruptions, cough, difficult breathing.

Camphor.—Depression of the fontanelles. For infants one or two drops on a little loaf sugar, crushed and mixed, and a small quantity of the camphorated sugar placed on the tongue.

Hyoscyamus.—Starting, twitching in sleep, heaviness of the head, fretfulness.

Veratrum Viride.—Fits of convulsions following each other rapidly.

Cina or *Ignatia.*—Convulsions from thread worms.

Aconitum.—Fever—restlessness, flushed face—and for *threatened* Convulsions (in alternation with *Bell.*) ; fits caused by fright or excitement.

Gelseminum.—Convulsions from *cerebral diseases.*

Zinc. Sulph. (pale face, sunken fontanelles, excitement without sign of congestion); *Nux Vom.* (from eating indigestible fruit); *Æthusa Cyn.* (with gastro-intestinal disorder and great pain, anguish, intolerance of milk).—*J. H. Clarke.*

Accessory Treatment.—All clothing about the neck, chest, and body should be loosened; the head raised; the face sprinkled with water, and plenty of fresh air admitted. A warm bath, at a temperature of 98° Fahr., is generally advisable, as it tends to withdraw the blood from the brain to the general surface of the body. The head should be cooled by the application of a thin damp cloth, frequently cooled by re-immersion in water. (See "Warm Bath," Sec. 32.)

If there be sickness without vomiting, warm water should be administered, or the throat tickled with a feather. An injection of tepid milk-and-water, or of milk-and-oil, should be given in case of constipation. Frictions along the spine with *chloroform and oil* are generally immediately successful in arresting Convulsions.

Preventive.—When a nursing mother becomes over-heated or violently excited, her blood and milk are thereby poisoned; the milk should then be withdrawn and the brain and blood allowed to cool down before nursing again, otherwise serious results might ensue. In some cases one or two doses of

Aconite or *Opium* should be given to the mother. When there is a tendency to Convulsions, as shown by a foul tongue and breath, disordered bowels, screaming, restlessness, etc., the addition of *lime-water*—a tablespoonful to a bottle of milk—often acts as a preventive.

94.—Laryngismus Stridulus (*Laryngismus Stridulus*)—Asthma of Millar—Spasmodic Croup—Child-Crowing.

Definition.—A spasm of the glottis, causing closure of the *rima*, generally occurring in the first sleep. Children are liable to it only during the first dentition; it may, however, occur in nervous, hysterical adults.

It is usually due to nervous irritation, especially during dentition, and, except when premonitory of disease of the brain, is easily cured.

Symptoms.—It comes on very *suddenly*, usually in the night; the child gasps and struggles to get breath; the lips become livid, and the countenance anxious; frequently there are cramps in various muscles, and suffocation seems imminent; presently the spasm ceases, and, with the opening of the glottis, with a whistling, cooing, or *crowing* sound, the paroxysm passes away and the inflation of the lungs is relieved.

Diagnosis.—It may be distinguished from Croup by the absence of cough, *hoarseness*, and fever, both before and after the attacks, and by the suddenness of its accession, the climax being attained almost in a moment. It may be distinguished from Paralysis of the Glottis thus: if the child can *in*spire but not *ex*pire, it is Spasm; if he can *ex*pire but not *in*spire, it is Paralysis.

Causes.—*Predisposing.* It appears to be hereditary in some families. Those who are of a scrofulous diathesis, who live in close, unwholesome air, who are insufficiently nourished, or are brought up by hand, who are delicate and reared with difficulty, whose sutures are long in closing, and whose assimilation is weak and easily disordered, are most liable to attack.

Exciting.—Difficult dentition, a simple cold, derangement of the digestive organs, and any irritation of the system may bring on an attack.

EPITOME OF TREATMENT.—

1. *During the attack.*—Very prompt administration of Acon., alternated with Samb. (*fear of suffocation and dry cough*); Gels., Bell. (*Convulsions*); Ipec. (*accumulation of mucus*); Spong., K.-Bich., Cup.

2. *During convalescence.*—Phos. (*cough, with soreness of the chest*); Spong. (*dry, hard cough*); Carbo Veg. or Hepar S. (*hoarseness, with wheezing cough*); Sulph.

LEADING INDICATIONS.—

Aconitum—Spasm of the larynx, inducing *difficult breathing;* febrile symptoms. In urgent cases, a dose every ten, fifteen, or thirty minutes. *Acon.* is of priceless value in spasmodic Croup, and often cures without the aid of any other remedy. If there be doubt as to the true character of the malady, it is advisable to alternate it with *Spong.* Even in true Croup, the remedy chosen should be alternated with *Acon.*, as spasm frequently occurs during the course of the disease.

Gelseminum.—This is an excellent reserve medicine for an occasional acute attack, which does not yield promptly and fully to *Acon.*

Phosphorus.—Cough, with soreness of the chest, following an attack.

Sambucus.—Burning, red, hot face, hot body, cold hands and feet, *during sleep; on awaking,* profuse perspiration on the face and body, which continues during waking hours; return of dry heat during sleep.

Belladonna.—Violent struggles for breath, *red face, dilated pupils,* headache.

Ipecacuanha.—Bronchial irritation, *rattling of phlegm in the chest,* which is at times detached, and causes vomiting.

Spongia.—Weak or hoarse voice between the attacks.

Ign. (when the disease has been brought on by fright); *Moschus,* (pure spasm, without any cough, hoarseness, or signs of catarrh of the larynx).

Administration.—The remedy may be given in two- or three-drop doses in half a teaspoonful of water every ten

minutes, for three or four times. After the attack is past, the medicine should be given three or four times a day for two or three days, to prevent their recurrence.

Accessory Means.—The child should be promptly raised up as soon as he begins to struggle, and placed in a warm bath. Meanwhile, the throat should be fomented by means of a sponge wrung out of hot water. Fresh air should be admitted to the room by an open window. A dash of cold water in the face or chest will sometimes excite respiration. Dr. Sylvester's method of recovery from Asphyxia might be resorted to (see Sec. on "Asphyxia"). As it is rare for more than one attack to occur in one night, the patient may be laid down again, and comfortably wrapped up, as soon as the fit is over. When teeth are seen to be nearly through, the gums should be lanced; the same purpose may be effected by the mother rubbing the gum with a piece of loaf sugar. Good hygienic conditions should be secured, and exciting causes, especially such as arise in the digestive organs, should be removed.

95.—Epilepsy (*Epilepsia*)—Falling Sickness—Fits.

Definition.—Sudden and complete loss of consciousness and sensibility, with spasmodic contractions of the muscles, lasting one, two, or three minutes, recurring without any typical regularity, and followed by exhaustion and deep sleep. The Greek term, *Επιλῆψια*, from which the name is derived, means literally a sudden seizure, in allusion to the suddenness of the attacks. The definite anatomical nature of the lesion is unknown; but there is a high probability that the *Medulla Oblongata* and the base of the brain are the parts from which the excitement of the motor nerves proceeds, which leads to the muscular Spasm.

Epilepsy is no new disease, and was perhaps as well known ages ago as at present. Notwithstanding our views of the gravity of the malady, greater importance was anciently attached to it, from its being regarded as a direct infliction of the celestial powers, in token of their displeasure with the individual afflicted, or the community of which he was a

member. In the Jewish, Grecian, and Roman philosophy, it was made the foundation of the belief of possession by evil spirits.

The Aura Epileptica.—In the majority of cases, the premonitory symptoms are too brief to allow the patient to remove to a convenient place, or even to give an intimation of what is about to happen. In other instances, an approaching seizure is clearly indicated for many minutes, or even hours, before its actual occurrence. The kind of warning is variable in different cases, often consisting of such symptoms as Headache, shooting pains, giddiness, indistinctness of vision, sparks of various colours, humming noises, or loud reports, strong odours, sneezing, strange tastes, Hoarseness, irritability, gloomy mood, spectral illusions, etc. But the most striking premonition is that called the *aura epileptica*, a sensation compared to a stream of warm or cold air, to the trickling of water, or to the creeping of an insect, which commences at the extremity of a limb, and gradually runs along the skin towards the head; or, occasionally, it gets no further than the pit of the stomach; and, as soon as it stops, the fit occurs. A knowledge of these circumstances is important, as, in some instances, time is afforded to interpose remedies that may avert the paroxysm, or at least to secure the patient's safety during a fit.

A Fit.—The patient utters a loud shriek or scream, and falls suddenly to the earth, convulsed and insensible. The cry is peculiar and often terrifying, even to animals. The convulsive movements, especially of the head and neck, are often very extreme, one side being frequently more affected than the other; there is violent closure of the jaws; the tongue is liable to be bitten; a foam issues from the mouth, often coloured by blood from the bitten tongue; the eyes quiver and roll about, or are fixed and staring; the hands are firmly clenched, and the thumbs bent inwards upon the palms; urine and fæces sometimes escape involuntarily; the breathing is impeded by Spasm of the larynx, and performed with a hissing sound; there is considerable elevation of temperature; the optic papillæ are injected; the cheeks and lips are of a deathly pallor, the veins of the

neck and forehead are greatly distended; the heart acts tumultuously, and death seems inevitable. Gradually, however, the symptoms remit, and the patient is left insensible and apparently in a sound sleep. A fit rarely lasts longer than from one to three minutes, although the painful nature of the spectacle makes it appear longer to a bystander.

Symptoms following a Fit.—Some few patients recover perfectly in a few minutes; some regain consciousness and then sink into profound sleep; but more frequently consciousness is not immediately recovered, the slumber succeeding the struggles without any lucid interval. On emerging from the slumber, the patient may merely feel languid and inert, or like a person stunned, or in a state bordering upon idiocy, unconscious of what has passed.

Grand Mal and Petit Mal.—The fit just described is *le grand mal* of the French; but there is also a milder form of the disease—*le petit mal*—in which there is but slight, or even unobserved, convulsion, only a transient pallor of the face, no bitten tongue, no foam, and but slight and momentary obscuration of the mental faculties. There is an endless variety in this form of the malady. But, although imperfect, it is yet real Epilepsy, and the "*petit mal*" and the "*grand*" often alternate, or the less grows into the greater.*

Consequences.—These are generally most disastrous both to the physical and moral condition. Oft-repeated, severe attacks tend to destroy control of the appetite and passions, enfeeble the memory, impair the intellectual faculties, and, in some instances, terminate in irremediable imbecility, or general Paralysis. These patients rarely attain old age.

Causes.—The most common is *hereditary* tendency. This may be manifested by what has been termed the convertibility of nervous disease. Thus, a choreic patient may beget an epileptic child, or *vice versâ*. This holds good of all

* The following is an illustration from Trousseau of the *petit mal*:—A child in the midst of his play stops, slowly turns his head to the right side, and gazes with wide-open eyes. There is no spasm of the facial muscles, but insensibility is at the same time so profound that a needle passed into his flesh is unfelt. In about five seconds, the child regains consciousness, but looks perplexed, or as though just awakening from a distressing dream. In a quarter of a minute more the attack is over, and the child resumes his play.

neurotic diseases. Intermarriage of families having a tendency to nervous disease, greatly increases the danger to the offspring. The marriage of *near relations* subject to such tendency magnifies the danger immensely. Injuries of the skull; local irritation, as a splinter or shot under the skin, or in some internal organ; Tumours; Inflammations; parasites in the brain; malformations of the skull, as one half being unlike the other; osseous deposits within the cranium, especially spiculæ of bone formed on the inside of the *dura mater*. In *post-mortem* examinations, the bones of the head are sometimes found thickened or otherwise diseased. It is well known that Epilepsy is most frequent in confirmed lunatics and idiots, as the result of some malformation of the brain. In children, the irritation of teething is the most common cause. The most frequent *exciting causes* are—derangement of the nervous or sexual systems,—Hysteria, immoderate sexual indulgence, Self-abuse, and physical and psychical prostration from any cause. The age at which the attacks most frequently commence is from the tenth to the twentieth year, when the important change of puberty takes place. The other most frequent period is from the second to the tenth year, during which the permanent teeth are cut.

Fright, fits of rage, overstraining the mind, gastric disorders, the irritation of worms—especially tænia *—menstrual irregularity or suppression, repelled eruptions—especially those about the head—and the sight of other epileptics, are also exciting causes.

Treatment.—*During a Fit.*—The patient's tongue should be put back into his mouth, and a cork or linen pad fixed between his molar teeth; he should be laid on a couch or rug, fresh air freely admitted around him, his head slightly raised, and all ligatures relaxed that interfere with circulation and respiration. Throwing cold water on the face appears to do no good; and restraint should not be exercised beyond what is necessary to prevent exposure, or to guard against injury. In Epilepsy preceded by the *aura*, a firm ligature applied above the part

* While, however, Epilepsy may arise, or the general health materially suffer from the presence of tænia, in some cases they exist without the slightest suspicion of the fact being entertained.

where the sensation is felt, or the immediate inhalation of the vapour of *Nitrite of Amyle*, is said to prevent the attack. After the fit, the patient should be allowed to pass the period of sleep which usually follows without disturbance.

Between the Fits.—In addition to the administration of any remedy indicated, an endeavour should be made to discover, and then if possible to remove, the cause of the malady. The disease is more amenable to treatment in children than in adults; but hereditary tendency is an unfavourable element in any case, and a cure is not always possible. The obscurity, which often surrounds the etiology of Epilepsy, should tone down our prognosis of cure. Homœopathy, however, contrasts most favourably with Allopathy; even when cure is out of the question, the striking relief afforded is worth all the pains taken to obtain it.

Epitome of Treatment.—

1. *Recent Epilepsy.*—Ign., Ac.-Hydroc., K.-Brom. "Kali Cyan."

2. *Chronic.*—Bell., Cup.-Acet., Calc., Sulph., K.-Hyd., Sil.

3. *From worms.*—Cin., Sant., Filix Mas., Teuc.

4.—*From onanism, sexual excesses*, etc.—Phos., Ac.-Phos., Chin., Ferr., Ac.-Sulph.

5. *From fright, and for fits in sleep.*—Opi.

6. *During Dentition.*—Treatment similar to that prescribed in the Section on "Infantile Convulsions," is generally successful.

7. *Additional remedies sometimes required.*—Chloral Hyd., gr. ss—j (*Petit Mal.*); Stram., Agar., Plumb., Ars., Hyos., Cic., Zinc., Zizia., Artemesia.

8. The following is an epitome of the treatment recommended by another authority:—*Cic. Vir.* (violent convulsions, frightful distortions of eyes and limbs); *Œnanth.* (violent convulsions, rigidity, foaming at the mouth); *Arg.-Nit.* (associated with digestive disorder, excessive belching of flatulence); when the belching is premonitory of a fit, *Arg.-Nit.* taken every half-hour will prevent it. When the *aura* is a wavy sensation in the brain, *Act.-R.* will ward off a fit.

Leading Indications.—

Belladonna.—Sparkling of the eyes, dilated pupils, intoler-

ance of light, flushes of heat in the head, and redness of the face, startings at the least noise, and other symptoms of cerebral congestion. If administered in the strong dilution as soon as the indications of an attack are noticed, it may ward it off, or mitigate its severity. Dr. Hughes suggests *Glon.* for this purpose. *Bell.* or *Cham.* are also useful when Epilepsy occurs during teething. See Sec. on "*Infantile Convulsions.*"

Cuprum.—This remedy is indicated in preference to *Bell.* by *paleness* of the face, and by the extreme severity of the Convulsions. Dr. Holland prescribed it in a case where every allopathic remedy had been ineffectually adopted, and where it acted magically. The child was not only subject to fits, but became most mischievous. *Ac.-Cupr.* 3x, in grain doses three times a day, restored her in about six weeks; and there has been no recurrence of the attacks for fifteen years.

Nitrite of Amyle.—This remedy is believed to possess unique powers in averting a seizure. As soon as the *aura*, or other premonitory symptom is perceived, the nitrite should be freely inhaled or sniffed up the nostrils. It is advisable for the epileptic to carry in his pocket a small stoppered bottle containing a sponge saturated with the medicine.

Nux Vom. (3x).—A striking case of cure of sixteen years' standing was recorded in the *Medical Investigator* a few years ago. An attack was always preceded by constipation, directly induced by anger, and marked by spasmodic rigidity of all the muscles, throwing back of the head, vertigo and dull pain in the occiput, buzzing in the ears, bloated appearance of the eyes, dryness of the mouth, flatulence, and numbness of the arms and legs. This remedy—twenty drops in half a glass of water, a dessertspoonful every three hours—was administered and continued for eight days, and although the patient has been angry many times, there has been no recurrence of the disease as far as we are aware.

Chamomilla.—Epilepsy in irritable children; the attacks are often preceded by *colicky pains*, sour vomitings, and *paleness* of one cheek and *redness* on the other.

Kali Brom.—This remedy is of comparatively modern use, and is largely prescribed both by homœopathic and allopathic physicians; and certainly, in numerous instances, it diminishes

the severity of the attacks, and lessens their frequency. In large doses, the drug is not suited for attacks of the *petit mal*, and its effects are most striking in recent cases. Its administration may be commenced in ten-grain doses three times a day, and, if necessary, the dose may be subsequently increased. After using this drug for a considerable time, in varying doses, we have not found its beneficial results more marked than those of the commonly-used remedies, especially *Bell.*, *Opi.*, and *Ars.*, and as troublesome complications sometimes arise from its use before good effects are obtained, we do not recommend its indiscriminate use.*

Kali Hyd.—Dr. T. K. Chambers recommends this drug as curative in recent cases, and ameliorative in chronic, and gives in his lectures interesting illustrative examples. We have used it with benefit in chronic cases.

Artemesia Vulg.—Fits recurring at intervals varying from three to five weeks; laceration of the tongue; dilatation of one pupil; picking with the fingers.

Sulphur.—Epilepsy from a suppressed eruption or discharge; or in scrofulous persons, and chronic cases. Under these conditions, *Calcarea* is also valuable. *Viscum* is said by Dr. Wilde to be specific in cases complicated with Menorrhagia.

Accessory Means.—Hygienic treatment, especially such as the causes of the disease suggest, is of great importance. Regular healthy exercise is beneficial, but it should never be carried too far, as fatigue often excites an attack. Epileptic patients require much rest and frequent change; boys and girls should not on any account sit at lessons for three or more consecutive hours, but studies and open-air recreation should be pleasantly blended.

Should fright, disappointment, anxiety, or other mental influences tend to make up the disease, *a thorough change* is necessary, including change of residence, companions, and habits. All ambitious intellectual exertion, especially rapid

* Dr. Maffey informs us that he once saw a large dose (90 grains) of *K.-Brom.* administered to a patient in Manchester Infirmary, who shortly afterwards had a smart attack of what, to all appearance, was a fit of Epilepsy. The patient had never before had a similar seizure, and, though watched by Dr. Maffey's orders, no return of the fit was perceived during the following eight months.

reading and writing against time, should be absolutely prohibited. But "moderate employment of the thoughts, especially on familiar and interesting hobbies, is useful in preventing that stagnation or concentration of the mind upon itself, which is so hurtful in all chronic complaints" (*Chambers*). Further, the mind requires pabulum and exercise for its healthy growth.

The *diet* should be nourishing and taken regularly, in moderate quantities, including animal food once or twice a day. As the appetite is often voracious, it should be judiciously controlled. Cold sponge-baths, with immersion of the *head*, taken quickly, and followed by abundant friction, are favourable; but shower-baths do not usually agree with patients, and bathing in the open sea is dangerous. All violent emotions, excesses of every kind, more especially sexual, must be strictly interdicted.

Feigned Epilepsy.—If the apparent sufferer be in a comfortable situation, or where he is not likely to sustain bodily injury, or in a public place; if his eyes be completely closed, or occasionally opened a little, and if on opening them the pupils contract at the light; if the skin perspire, the tongue be not bitten, and neither urine nor fæces voided; if the proposal to inflict severe pain or injury made in his hearing occasion signs of recognition; it may be presumed that he is an impostor.

96.—Chorea (*Chorea*)—St. Vitus's Dance.

Definition.—A functional derangement of the motor nerves, causing convulsive movements of the face and limbs, occasioning ludicrous gesticulations, arising from incomplete subserviency of the muscles to the will. It has been wittily termed *insanity of the Voluntary muscles*. The only involuntary muscle which suffers is the heart, which is histologically allied to the voluntary muscles.

Symptoms.—The disease generally shows itself in the first instance in one arm, most commonly the left, which the child grasps at the wrist with the right hand in order to prevent

movement. The leg of the affected side is next involved; afterwards, the muscles of the face, neck, and tongue (slightly) are somewhat convulsed. The lack of motor power is, however, not only shown in defective control of the muscles, but also in actual feebleness in use. The arm loses acting strength, the leg drags in walking. The Chorea which commences at the time of puberty, especially in girls, is often more violent than any other, and is usually and appropriately termed *acute* Chorea. The muscular agitation is violent and persistent, and soon involves all the voluntary muscles. Head, trunk, and limbs are all in a state of convulsion; the patient can neither stand nor walk, and can with difficulty lie in bed. The incessant movement produces inflammation, abrasions, sores, suppurations, which increase the patient's distress. The mind shares in the constitutional agitation, and sleep is impossible. The pulse is rapid and the tongue dry. Delirium ensues, and if there be much convulsion of the muscles of the neck, swallowing becomes impossible, so that to avert starvation the patient must be fed *per rectum*. In such cases, the course speedily attains a fatal issue. But in childhood, the Chorea is usually mild and curable, with a tendency to relapse, which must be guarded against. The disease is almost limited to early life, and is more prevalent at the times of second dentition and puberty than at any others. The most frequently-occurring cases are in children of eight or ten years old. When it advances gradually, it is more persistent than when its attack is sudden. The decline is generally gradual through several weeks, or even months; it lasts occasionally for life; but is rarely fatal.

Causes.—*Fright*, violent emotion, irritation from dentition, costiveness or worms, Onanism, deranged uterine functions, Anæmia, Hysteria, *descent from nervous, hysterical women*, and Rheumatism. It may, however, be due to organic disease of the nerve-centres, particularly when it occurs late in life. Dr. Schmidt states that there is a painful point somewhere along the spine, that pain always precedes, or accompanies the peculiar movements, and believes Chorea to be due to alterations of the nerve-centres. A frequent cause is "contagion of the eye," that is, susceptible persons seeing others suffering

from the disease are liable to contract it; thus *stammering and stuttering*, local manifestations of Chorea, frequently result from seeing or imitating others.

EPITOME OF TREATMENT.—

1. *From fright.*—Acon., Ign.

2. *From worms.*—Cin., Sant., Merc., Ign., Spig.

3. *From Scrofula or other cachexia.*—Iod., Ars.; Ferr. (*with Anæmia*), Sulph. See also the accessory treatment under "Scrofula," Sec. 72.

4. *From Rheumatism.*—Cimic., Spig.

5. *From causes not traceable.*—Cup.-M., Bell., Agar., Stram., Hyos., Zinc.,* Ars. The last mentioned remedy is of great value, especially in uncomplicated cases, and is often curative.

"*Ver.-Vir.* (an application to the spine, with the hand, night and morning, equal parts of *Ver.-Vir.*, *spirit of wine*, and *water*); *Act. R.* (when there are symptoms of rheumatism, restlessness at night); *Calc. Phos.* (in scrofulous children); *Cup.-Acet.* (inveterate cases). In all cases the patient should be well fed; *Cod Liver Oil* should be given to children when it can be tolerated."—*J. H. Clarke.*

In febrile, rheumatic, anæmic, or strumous patients, a larger range of remedies is generally required.

Palliatives, in severe cases.—K.-Brom. *Chloral Hyd.*, *Cann.-Ind.*, and *Chloroform.*

GENERAL MEASURES.—The most important part of the treatment of Chorea consists in the use of moral influences, especially when the disease does not arise from any appreciable cause, and in removing the patient as far as possible from emotional excitement. (1) The patient must be removed from too-sympathising friends, and placed under the care of a kind but firm guardian. (2) He must be encouraged to exercise his will in the control of the muscles; if the hands be affected, he should be required to carry crockery or other fragile articles, or if the lower limbs, to walk on short stilts, etc.; if the muscles of speech be implicated, inducing stam-

* Dr. W. F. Wade recommends *Zinci Sulph.* in gradually increased quantities till nausea be induced by each dose. This is certainly heroic treatment, though he reports it very successful.

mering or stuttering,* "the best way is for the person to humble himself to the infant state, and be taught anew the use of language from those ingenious instructors who teach the deaf and dumb, and systematically learn to shape slowly and deliberately his mouth into the form requisite for definite enunciation. By practising thus at leisure, and before a looking-glass, he may gain great control over the articulating muscles" (*Chambers*). (3) The patient must not be allowed to associate with others similarly affected; nor should his disease be referred to in his presence; his attention should rather be diverted from it as much as possible. (4) *Galvanism.*—Benedict declares that out of twenty cases treated by him with the constant galvanic current, not one has failed to recover. (5) A liniment of equal parts of *Oil of Almonds* and *Chloroform*, well rubbed into the spine night and morning, is very serviceable in Chorea not traceable to organic disease of the nerves. (6) When the constitution is feeble, the best *hygienic* measures must be adopted. In simple cases, the best treatment is to give the patient a sufficiency of good, wholesome food; with *rest in bed* for a few days to secure a uniform temperature, repose for the muscular and nervous systems, and a maximum reduction of the wear and tear of the system. Fatigue increases the involuntary movements. *Forcible* control of the muscles only increases the disease.

97.—Hysteria (*Hysteria*).

Definition.—A functional disorder of the nervous system, chiefly, but not exclusively, confined to women, occurring in

* This form of imperfect speech must not be confounded with the stammering which arises from a habit of excited speaking, in which the patient's words splutter out of his mouth in hurried confusion, with an occasional hesitating interruption, leaving the hearer to arrange them as best he may. This may have been primarily induced by a nervous excitability, and may be overcome by the patient's exercising self-control, and speaking each word *slowly and deliberately*. Some persons, after uttering a few words, suddenly stop, and the hearer must patiently wait for the next moiety of the speech; for if impatience be manifested, the interruption is only prolonged. This impediment may be controlled by learning anew the use of language in the manner above indicated.

persons of a morbid impressionability of the nervous centres, and in whom there is not that equilibrium between the nervous and other parts of the organisation which usually exists.

Formerly an opinion was current that Hysteria was directly due to disorders of the womb; but this we know to be incorrect, for it exists in women in whom all the functions of the womb are healthily performed, and even in women born without a womb; again, it is also met with in the *male* sex, and we believe more frequently than is commonly supposed; men, especially young men, of exalted impressionability, under the influence of some powerful emotion, coupled, perhaps, with excessive bodily fatigue, break down under their feelings and play the part of women.

Causes.—From the above remarks it will be readily inferred that debility is a great factor in the production of Hysteria. Indeed, the absence of any *post-mortem* signs of disease leads to the conclusion that this is generally the sole predisposing cause. When the supply of blood to the nerves is defective in quantity or quality, the most favourable condition exists for the production of Hysteria; for the nerve-centres being thus predisposed, any trivial irritation may excite the characteristic phenomena. This condition being more readily induced in woman from the greater delicacy of her organism, we see the reason why Hysteria is so frequently associated with uterine derangement or irritation. Further, as an exciting cause, in persons thus predisposed, mental perturbation must not be omitted.

Symptoms.—Hysteria is remarkable for the wide range and irregular character of its symptoms, and the multitudinous diseases it may mimic. As illustrations of the forms it may assume, we may mention, especially, loss of voice, stricture of the œsophagus, Laryngitis, a barking cough (more annoying to the hearer than to the patient), Pleurisy, heart-disease, difficulty in urinating, Neuralgia, disease of the spine or joints, and many inflammatory diseases. In these cases the patient deceives herself, and by extreme statements of her sufferings endeavours to mislead others. In some instances, there may co-exist with Hysteria, Indigestion, a more or less definite affection of the head, chest, or abdomen, or other condition

of impaired health or constitutional delicacy. But generally Hysteria disappears in the presence of actual disease.

Diagnosis.—In the Protean forms which this affection assumes, diagnosis is not always easy. The hysterical *fit*, however, is distinguished from every other by the fact that it never occurs when the patient is *alone;* that the muscular movements are struggling, capricious, and associated with calm countenance, natural eyes, and heated skin, just as they would be with the muscular movements of a healthy person; that the breathing is deep and sighing; and that consciousness is seldom *wholly* absent. The profuse flow of limpid urine, and the violent laughter and crying at the beginning and close of the attack, are not less characteristic.

When Hysteria simulates chronic joint-disease, chloroform is of great assistance in diagnosis; the patient, under its influence, being unable to resist, the real condition of the joint is ascertained, and the absence of actual disease becomes at once apparent.

The hysteric Fit.—The patient screams or makes an incoherent noise, appears to lose all voluntary power and consciousness, and falls to the ground. On closely watching a case, however, it will be noticed that there is not absolute loss of consciousness; the patient contrives to fall so as not to injure herself or dress; an attack does not occur when she is asleep or alone; the countenance is not distorted as in Epilepsy; the eyelids may quiver and the eyes be turned up, but the eyes are not wide open, nor the pupils dilated, as in Epilepsy, and the patient may be observed to see and to look; the breathing is noisy and irregular, but there is no such absolute arrest of breathing as to cause asphyxia; the fit continues for an indefinite period, followed by apparent great exhaustion, but not by real stupor.

Epitome of Treatment.—

1. *The hysteric fit.*—Camph., Mosch.
2. *Between the fits.*—Ign., Plat., Cimic., Aur.
4. *Undefined cases.*—Asaf., Bell., Puls., Staph., Valer., Cocc., Hyos., Nux V., Nux Mosch., Cham.

Leading Indications.—*During the paroxysm.*—*Camphor* is an invaluable remedy, and often terminates a fit immediately,

especially if there is general coldness of the surface. Two drops on a piece of loaf-sugar, or two pilules saturated with the strong tincture, may be given every few minutes, or two or three times during the fit; or a phial of the strong tincture may be applied to the nose.

Moschus.—In other cases, this remedy may be used instead of *Camph.*, both internally and by olfaction.

Between the attacks a selection from the following remedies may be made, and the general treatment afterwards pointed out adapted to the peculiarities of the case.

Asafœtida.—Predominant *throat* symptoms, *burning dryness*, or sensation of a ball rising in the throat; *spasms;* inertia or irritability of the biliary system; cutting, *crampy pains*, or distention of the abdomen; nausea and inclination to vomit; constipation or diarrhœa, with frequent urging; high-coloured, strong-smelling urine; premature, painful menstruation; uterine excitement; depressed, fitful spirits.

Ignatia.—Convulsions with the *sensation of a ball in the throat*, suffocative constrictive sensation, and difficult swallowing; exalted impressionability of the whole nervous system, with predominant pensive, tearful mood, or frequent changes from high spirits to dejection; Hysteria from *disappointment*, mortification, or any intense mental excitement.

Valerianate of Zinc.—The main indications for this remedy are:—Hysterical spasms that come on chiefly in the evening; lump in throat; profuse, clear, watery urine; great sensitiveness and tendency to cry, and prostration; Neuralgia, particularly ovarian. Dr. Burt, of Chicago, regards this as the most valuable of the long list of remedies for Hysteria, and says he has cured hundreds of cases with it, generally giving the second decimal trituration.

Causticum.—Loss of voice; pain in the neck or abdomen; profuse flow of urine; dejection.

Moschus.—Hysterical attacks with *fainting;* small, fluttering pulse; coldness of the surface. As before stated, it is specially useful during the paroxysm, and often cuts it short.

Platina.—Hysteria with *depression of spirits;* anxiety; contemptuousness; irritability, and nervous weakness, especially

if associated with uterine congestion; early, excessive, or too prolonged menstruation; sexual excitement.

Nux Vomica.—Hysteria with *constipation*, bitter or acrid eructations, *flatulence*, hiccough, distention and pain in the stomach, headache, giddiness, faintness, etc. After a few days, *Sulphur* may be substituted.

Aurum.—Hysteria with excessive menstrual discharge, congestive headache, *melancholy*, etc.

Cimicifuga.—Hysteria associated with *uterine disturbance;* mental restlessness, irritability, and despondency; *pains in the left side and under the breast; sinking* at the stomach, etc.

Pulsatilla.—Hysteria with *suppressed period* or uterine disorders, especially when the *Puls.* temperament corresponds. It may be followed by *Sabina* or *Silicea.*

Cocculus.—Hysteria with *menstrual colic*, irritability, dejection, and copious discharges of pale urine.

Coffea.—Hysterical symptoms from worry, with *sleeplessness*, the mental faculties being *incessantly active.* According to Dr. Ludlam, it is specially adapted to the affections of elderly ladies.

Tarent.—Convulsive hysteria.

Accessory Measures.—(1) *Occupation.* In this, as in all nervous diseases, the patient will derive great benefit from anything that serves to divert the thoughts, and counteract the natural tendency to dwell upon the various symptoms of the complaint, till the patient loses all interest in life and becomes a burden to her friends. Such a state should be anticipated and prevented by providing suitable occupation of an interesting and useful nature. The patient should never be allowed to be idle. The beneficial effects of employment will be hardly credited by those who have not witnessed them. The necessity for this injunction may be inferred from the fact that Hysteria is generally found engrafted upon some form of debility which is in most cases the result of idleness. Investigation reveals the fact that while neither mental nor bodily faculties are ever fully exerted, the emotions are surrendered to the most ungoverned excitement.

(2) *Removal from home influences.* The injudicious kindness of friends should be sedulously guarded against. Hysterical

patients are quick to perceive the impression made upon those around them, and will always be led to exaggerate their ailments in order to secure such sympathy. For this they have a morbid desire, which is often fostered by the ill-judged kindness of those around them. The truest kindness will be shown in the exercise of a firm and judicious authority. The patient requires to be roused, and made to exert herself. A strong and continued effort must be made to overcome all bad habits, and to banish all hurtful influences. Here the earnest co-operation of friends is most essential. Unfortunately, however, friends often fail to perceive the absolute necessity for a method of treatment which might appear severe or even rigorous. Hence, experience teaches that, when practicable, a removal from home for a time will generally be found useful.

(3) *The disuse of stimulants.* In this disease, stimulants afford only a temporary relief, while they aggravate and perpetuate that exhaustion which patients imagine they will remove. There is also always a danger that a taste for stimulants may be acquired, and habits of intemperance ensue from having recourse to them in this disorder. Could patients only be induced to dispense with the delusive draught, in many cases nerve-power would be recovered, the appetite would return, and general health be re-established.

(4) *The shower-bath.* This is an admirable means of imparting moral energy to the character, while its beneficial effect upon the circulation may be seen in the pink glow brought to the surface of the body. When a patient is unaccustomed to bathing, a tepid bath may be taken for a few days, and the temperature gradually lowered. The use of an oiled silk cap will obviate the inconvenience of wetting the hair.

(5) *General caution.* All amusements of an exciting nature should be relinquished, such as novel-reading, attendance at balls, theatres, etc.; close rooms, and badly-ventilated or too brilliantly-lighted churches should be avoided; no tightly-fitting dresses or stays should be worn; early habits as to rising and retiring should be adopted; and proper attention paid to the general health, diet, study, and recreation. It is well to avoid calling the disorder

"Hysteria" in the presence of the patient, and to assure her that it is curable and not dangerous.

98.—Hypochondriasis (*Hypochondriasis*).

A functional disorder of the nervous system, occurring in persons of morbid impressionability of the nervous centres, which may be expressed by the term "misery." It used to be called "the spleen." It is a constitutional disease, independent of outward circumstances for its origin; a derangement of the nervous system, causing mental depression, want of resolution, extreme selfism, and laziness of body and mind. There is no actual disorder of the intellect, for the mind is vigorous, active, often of a superior order, sometimes in a state of hyperæsthesia; there is, therefore, no freedom from moral responsibility. A real organic disease, acting as an irritant on a hereditarily predisposed nervous system, may evoke this "miserable" condition; but the diseases from which the patient thinks he suffers are generally either caused by the condition or are altogether illusory. The disease is chiefly one of middle life, and rarely appears after the age of fifty. It is much more common among men than women—among whom Hysteria takes its place. It is associated with the *tædium vitæ* of a purposeless existence, in which a man is all-in-all to himself.

Symptoms.—The patient imagines himself, without sufficient ground, the subject of some serious disease, is often haunted with the dread of insanity or of death, and becomes selfishly absorbed in a narrow circle of feelings, concentrating all his energies on his own miserable ailments. Frequently, at first, he considers himself dyspeptic, from the fact that he is troubled with flatulence, has a furred tongue, foul breath, irregular appetite, and generally obstinate constipation. After a time, he complains of a gnawing or burning pain, of uneasiness at the pit of the stomach, or of some more serious disease. He has great hope of getting rid of his malady, and strong faith, notwithstanding repeated failures, in treatment. Afterwards, from attention being directed to particular

organs, functional disturbances arise—flushes, palpitation, suppression of bile, or bilious diarrhœa; symptoms which tend to confirm the belief that organic disease exists.

Causes.—Hereditary influences are potent and common: a taint of insanity, or other grave nervous disease, may be generally traced in near or remote ancestors. The development of the disease is usually in connection with the conditions of middle life, especially indolence and luxury; or, on the other hand, with anxiety and conscious failure in efforts to provide for relations and dependents. Severe shocks of a moral or emotional nature may give rise to the malady. The patient's complaints may, however, be not merely *fanciful*, but due to actual disease. Organic diseases of the liver or stomach are especially likely to evoke the symptoms of Hypochondriasis, or they may arise, or be excited into new action, by a concurrent morbid process. The statements and symptoms of a hypochondriac should, therefore, be carefully examined. It is often said that *reading medical books* frightens persons into the disease. But this cause must be very limited and trifling compared with the more potent and general operation of such influences as grief, fatigue, the failure of efforts, or the miserable and heart-wearing habits of an *idle life*.

Treatment.—*Nux Vom.*—Hypochondriasis associated with *affections of the liver*, irritability, and fractious disposition.

Aurum.—Melancholy, which nothing seems to affect; loathing of life, or a *suicidal tendency; religious melancholy;* uneasiness, apprehensiveness, sullenness, and indisposition to conversation.

Arsenicum.—Melancholy, with debility; also for the *burning pains* sometimes complained of.

Ignatia.—Dejection caused by the loss of friends, pecuniary disappointments, or other *depressing circumstances*.

Pulsatilla.—Patients inclined to weep, and of *a quiet* and *gentle disposition*, the reverse of the *Nux-V.* temperament.

Platina.—Where the dejection is caused by derangements of the uterine functions, especially at the change of life. *Sepia*, *Petroleum*, and *Anacardium* are also useful under similar conditions.

Accessory Means.—The administration of medicines may, however, minister to the inordinate selfism of the hypochondriac; active employment, which diverts the attention of the sufferer from himself, is of first importance. The weary mind should be relieved, and vigour of body and cheerfulness of spirits secured by a course of out-of-door exercises, physical training, bathing, and suitable dietetic arrangements. Horse-exercise is particularly advantageous. Exercise should be employed in such a manner as may be amusing to the patient, and to the extent of the healthy action of the muscles, but never sufficient to produce severe fatigue. If Indigestion exist, the article on that subject should be consulted. Hypochondriasis from sexual vices requires determined and persistent care. The reading of the patient requires supervision; medical works must be forbidden. Much may be done by interesting the hypochondriac in works of benevolence which require thought, and active superintendence.

99.—Neuralgia (*Neuralgia*).

Definition.—Severe darting, stabbing, or burning pain along a nerve-trunk or its branches, chiefly affecting those of the head and face, recurring in paroxysms, at regular or irregular intervals: the periods of intermission being, in recent cases, free from any suffering; but in chronic cases, more or less persistent local pain and mischief occur, from some morbid condition of the nerves of sensation, which is the consequence of a local, or more frequently of a general, affection.

Varieties.—The chief *superficial* Neuralgias are the following: (1) *Facial Neuralgia*—the branches of the fifth pair of nerves are the seat of the pain; any one, or in rare cases, all three, of its divisions may be involved; it is commonly recognised as *Tic-douloureux*, and more frequently affects women than men. (2) *Hemicrania* or *Brow-Ague*—the seat of pain being just above the eye-brow. (3) *Intercostal Neuralgia* (Pleurodynia)—often associated with an eruption of clustered vesicles (*Herpes zoster*). (4) *Sciatica*—Neuralgia

affecting the sciatic nerve from the nates to the knee, and sometimes to the ankle.

Of the *visceral Neuralgias* we may mention *Gastrodynia*—the disease being located in the nerves of the stomach; *Angina pectoris*—the cardiac nerves being involved; *Hepatic*—the nerves of the liver; *Ovarian*—those of the ovary; *Testicular*—those of the testicle.

Of all the varieties of Neuralgia, those described as *Tic-douloureux* or trifacial Neuralgia, and *Sciatica*, are most frequent.

Symptoms.—Darting or shooting pain in the course of a nerve, of different degrees of intensity, at times almost unendurable; the severe form generally comes on suddenly, and is of a sharp, darting, or tearing character, coursing along the trunk or ramifications of the affected nerve. Sometimes there is spasm in the muscles that are supplied by the nerve thus affected; in some cases, heat and redness of the surface, with augmented secretion from the neighbouring organs, as a flow of saliva or tears when the nerves of the jaw or eyes are implicated; in others, and this is very common, especially in chronic cases, there are "*tender spots* at various points where the affected nerves pass from a deeper to a more superficial level, and particularly where they emerge from bony canals, or pierce fibrous fasciæ" (*Anstie*). In many cases, a paroxysm of Neuralgia is preceded by *anæsthesia* or diminished sensibility of the nerves of feeling. A frequent, if not an invariable, concomitant symptom is general or local *debility*. It is true, Neuralgia is sometimes supposed to be associated with muscular vigour or robustness, but a close examination will almost uniformly reveal evidences of deterioration in the nervous system. This is confirmed by the very common observation, that depressing agents—as bodily fatigue, or mental anxiety—act as exciting causes of Neuralgia, or aggravate an existing attack.

The duration of Neuralgia is very uncertain; an attack may pass off after a few paroxysms, or it may persist for many days or months, with a well-marked, or irregular, intermittent, or remittent character.

Neuralgia and Grey Hair.—The hair undergoes remark

able changes under the influence of Neuralgia. Dr. Anstie noted greyness of hair on the same side in eleven instances out of twenty; seven of these were cases of Neuralgia of the ophthalmic division of the fifth nerve; in four of these cases there was greyness of part of the eye-brow on the affected side. The same observer has also noted fluctuation of the colour, the greyness actually increasing during, and for some time after, an acute paroxysm, the hair subsequently returning more or less to its natural colour. (See "Neuralgia and its Counterfeits.")

Causes.—These may be *hereditary*, *constitutional*, or *local*. Neuralgia is distinctly *hereditary*, occurring in particular families, and appearing in successive generations. It is well known, also, that such neuralgic families are liable to the more profound derangements of the nervous system—Paralysis, Epilepsy, Hypochondriasis, and even softening of the brain and Insanity—indicating some congenital imperfections in the formation of the nerve-cells and fibres. This seems to be proved by the fact that, though a precisely similar accident occur to a hundred persons, not more than two or three will experience any Neuralgia; and these will probably be found to belong to a neuralgic family.

Constitutional causes are — Impairment of the general health; *depressing influences*, whether mental or physical, as night-watching, sleeplessness, anxiety, insufficient nourishment, or violent exertion; hæmorrhage and consequent debility; affections of the alimentary or urinary organs; exposure to wet and cold—to *strong and cold winds*, which are frequent causes of irritation to the animal nervous system; a gouty, rheumatic, or syphilitic taint; decay or loss of teeth; malaria; and, lastly, organic degeneration at the decline of life, which is the most severe and intractable form presented to the physician. The great majority of patients is found among the hard-working, the poor, the badly-nourished classes, and, as before stated, men suffer less frequently than women. The cause of this is, that men are better protected, both naturally and artificially, from the effects of exposure, and that women are tempted to indulge in brief exposures in the open-air from warm rooms without any suitable covering

to the head, or any protection to the face. The face of man, on the contrary, is covered by a *beard* which shields him from injury by exposure. He also spends less time in the relaxing atmosphere of heated rooms, and enjoys to a greater extent the bracing effects of out-of-door exercise.

Local causes may be—wounds; lodgment of a foreign body in the substance of a nerve trunk; gun-shot wounds, or other injuries; tumours, especially Cancer; spiculæ of bone pressing on the nerve (an occasional cause of facial Neuralgia); carious teeth or stumps. Even Neuralgia from injury is aggravated by any impairment of the constitutional vigour.

Treatment.—In many cases, this must be both local and general. The first includes the detection, and if possible the removal, of any source of local irritation of the nerve, either at its source, or in any part of its course. The second includes the medicinal and general measures afterwards pointed out. A clue to the treatment may be gathered from the *causes*, for as these are various, it cannot be expected that any single drug, or any one plan of treatment, will be uniformly effective.

Epitome of Treatment.—

1. *Facial Neuralgia.*—Bell., Ars., Acon., Coloc., Spig., Phos.

2. *Hemicrania or Brow-ague.*—Chin., Nux V., Bell., Ign., Ars., Coff.

3. *Gastrodynia and Enteralgia.*—Nux V., Ars., Coloc.

4. *Neuralgia of the heart.*—Bell., Cact., Spig., Ver.-Vir.

5. *Sciatica.*—Ars., Coloc., Acon., Rhus Tox.

6. *Pleurodynia.*—Ran.-Bulb., Arn., Acon., Ars., Cim.

7. *From loss of animal fluids.*—Chin., Ac.-Phos., Phos.

8. *From mechanical injuries.*—Arn., Acon.

9. *From malaria.*—Chin. or Sulph.-Quin.

Leading Indications.—

Arsenicum.—Burning or tearing intermittent *pains*, having a tendency to *periodicity;* the pain is aggravated by the continuous application of cold; increased at night or during rest, but lessened during exercise, and generally first occurs on the left side, it may be of the face, involving the same

side of the head, the eye, and the ear. There are generally associated with this form of Neuralgia, excessive restlessness and *anguish*, a *general exhausted or debilitated condition*, *small pulse*, *cold extremities*, etc. Influenza, malaria, overwork, or, more generally, some constitutional cachexia, may have caused the disease.

The judicious employment of this potent mineral is often attended with the most marked success in neuralgic affections. The homœopathic law, indeed, leads us to expect that it would be so, for immoderate doses of *Arsenic* cause true Neuralgia. Persons who have attempted to poison themselves with it are said to suffer excruciating pains along the course of the nerves.

Phosphorus.—In Neuralgia from debilitated conditions of the nervous system, this remedy is equal or even superior to *Arsenic*, especially when due to mental overwork, or if associated with Migraine.

Belladonna.—Acute, throbbing, intermittent pains, with *redness of the affected part*, and unusual *sensitiveness* to light, noise, and movement. Neuralgia of the fifth pair of nerves, and Hemicrania, are the varieties chiefly curable by *Bell.* In most cases the appearance of the patient strongly contrasts with that described under *Ars.*, the habit being *plethoric.*

Aconitum.—*Facial Neuralgia from cold*, anxiety, or night-watching; the pains are severe, recur in paroxysms, are worse at night; and are accompanied by congestion in the head, lungs, or heart. Recent acute *Sciatica.*

Colocynthis.—Severe paroxysms of *cutting pains*, chiefly on the left side of the body; the lancinations are sudden, violent, and often extend from the point of origin to a distance. Facial Neuralgia, Enteralgia, and Sciatica, having these symptoms, are curable by this remedy.

China or Quinine.—Neuralgia from *malaria*, or from *loss of blood* or other animal fluids. *Brow-ague* from these causes comes within the range of this remedy.

Chamomilla.—Neuralgia of the *face and neck*, also where there is much *nervousness* and *severe pains.*

Spigelia.—Neuralgic headache and faceache, especially when *the eye is affected;* the pains are jerking and tearing, and are aggravated by movement and stooping.

Rhus Tox.—*Chronic Sciatica,* especially if associated with Rheumatism, stiffness, and lameness; the pains are worst on first moving the affected part, and at night.

Rhododendron Chrys.—Neuralgia of the extremities.

Kalmia Latifolia.—Dr. Ockford informs us that he has relieved more cases of general Neuralgia with *Kalmia Latifolia,* than with any other remedies. He mentions no special indications, save "Neuralgia."

Veratrum Album.—Neuralgia of one side of the face and head, with sensation of *icy coldness* in the part affected.

Sulphur.—Intermittent Neuralgia. Pain worse at night, going away in the morning, but returning in the forenoon.

External Applications.—When the pain is excessively severe, and does not yield promptly to internal remedies, an *Aconite lotion* may be tried, and is often quickly successful. It is prepared by adding about a dozen drops of the strong tincture of *Aconitum* to four tablespoonfuls of water, and may be applied hot or cold, as found most agreeable to the patient, by means of two or three folds of linen. Or *Bell.* may be used in the same way. Painting the course of the nerve, from the root, or where the nerve emerges from the deep fascia, with the pure tincture of *Acon.* or *Bell.* is even more prompt in its action. Under various names, they are sold as homœopathic nostrums for Neuralgia.

Chloroform liniment is also recommended as a local remedy.

Accessory Means.—The *Diet* is an important part of the treatment, and should be as nutritive and abundant as the condition of the digestive organs will permit. It is especially necessary that *animal fats* should enter largely into the diet, and any aversion to them on the part of the patient, or inability to digest them, should be overcome; well-directed efforts of this nature are nearly always successful. The particular form of fat is not important, and that variety may be adopted which can be best tolerated. *Cod-liver oil,* butter, cream, or even olive-oil, should be used in quantities as large as the digestive organs can bear. "In some way or other, fat must undoubtedly be applied to the nutrition of the nervous system if it is to be maintained in its organic integrity, since fat is one of the most important, if not the

most important, of its organic ingredients. . . . To Dr. Radcliffe belongs the merit of having been chiefly instrumental in bringing forward this therapeutical fact in this country, and it is one which I have had repeated occasions to verify. It is a very singular circumstance, also pointed out by Dr. Radcliffe, that neuralgic patients have, with rare exceptions, a dislike to fatty food of all kinds, and systematically neglect its use. And it has several times occurred to me to see patients entirely lose neuralgic pains, which had troubled them for a considerable time, after the adoption of a simple alteration in their diet, by which the proportion of fatty ingredients in it was considerably increased" (*Dr. F. E. Anstie*). The Author has repeatedly found the administration of *Pulsatilla* helpful in removing the objection to fatty kinds of food.

Protection from cold is another important element in the treatment. Exposure to a cold, damp atmosphere, with insufficient clothing, often acts as an exciting cause of Neuralgia, and should be avoided, as every recurrence of the disease tends to develop the constitutional cachexia and to strengthen its hold on the system. Warm clothing, including flannel, is a great protection from atmospheric changes, and should be adopted by all neuralgic patients. *Bathing*, including salt-water baths, sponging followed by friction, or the manipulations of a clever *shampooer;* moderate and regular out-of-door exercise sufficient to favour nutrition without causing fatigue. A change of air, and sometimes entire change of habits, are necessary to ensure a cure. Lastly, *Rest* is an important item in the cure of Neuralgia, especially in the case of hard-working and over-taxed patients.

Electricity.—Good results may be procured from the employment of electricity, especially in cases of Gastrodynia. A constant voltaic current is required in cases of pain, though a Faradic current sometimes relieves. Both electrodes should be firmly and continuously pressed upon the skin, one over the origin of the nerve, the other over the focus of the pain, so as to include the circuit of the affected nerves. Five cells may be sufficient at first, increasing afterwards to

fifteen or twenty, or as many as the patient can bear without pain. The direction of the current, as from centre to periphery, or *vice versâ*, seems unimportant, but the current should be gentle and steady. Drawing sparks along the track of the affected branches of the nerve will sometimes cure the most obstinate cases; and a similar proceeding with regard to the sciatic nerve is equally beneficial in Sciatica.

Division of the affected nerve, as a means of curing Neuralgia, is alike unscientific and useless. But the *subcutaneous injection of Morphia* is often a valuable palliative; it is, however, generally rendered unnecessary by the administration of homœopathic remedies, and may even favour the periodic return of the pain, or exert a fascination as potent as that of alcohol.

100.—Nervous Sick-Headache.

Definition.—An affection marked by Headache, dislike for, or indifference to, food, and frequently by nausea and Vomiting; due to cerebral exhaustion or idiosyncrasy, rather than stomachic disorder.

The derangement referred to in this Section is not simply that described as a *bilious attack*, or the Headache following a too heavy dinner, or the taking too much wine or spirits; for this may occur in any person from such indulgences; nor that resulting from the indigestion of some special article of diet, which only disagrees with particular persons; but the Headache from nervous causes.

Symptoms.—They usually commence on rising in the morning, the patient being pale, dark around the eyes, the pupils contracted, and looking and feeling extremely ill. Giddiness, swimming in the head, throbbing of the temples, and stupefying or agonising, deeply-seated Headache, often limited to one spot on the side of the head, on the forehead, over the eyes, and increased by movement, noise, strong light, and any kind of mental perturbation. The gastric symptoms—clammy mouth, anorexia, nausea and vomiting, or more generally

retching—are secondary rather than primary, having no necessary connection with any impropriety of diet.

Causes.—*Predisposing.*—A peculiar nervous temperament, which is often hereditary, and runs in families. The real cause, therefore, lies deep in the patient's idiosyncrasy, and may be developed in numerous and widely different ways. The excessive use of tea or coffee is also in some cases a predisposing cause; also unhealthy occupations, sewage-gases, malaria, the employment of arsenic in wall-papers, or in articles of dress; reflex Neuralgia from dental or other causes, a sedentary monotonous life with the use of alcoholic beverages, and probably other varying causes. *Exciting.*—Whatever produces a wonderful impression on the nervous system of a person thus predisposed may develop an attack, as fright, loud noises, exposure to a hot sun, a strong wind, or extremes of temperature. Moreover, mental or bodily fatigue, worry, the pressure of business or family anxieties, deprivation of sleep or of food, prolonged nursing, and other causes of nervous exhaustion, are invariably succeeded by nervous or, as it may be termed, asthenic headache. True Sick-headache, then, may occur in the most abstemious persons, and is not at all necessarily connected with a disordered digestive apparatus.

Sick-Headache and other Disorders.—It is most important to distinguish this affection from those acute diseases of which it is an inceptive or accompanying symptom, as Scarlatina, Typhus, Albuminuria, Inflammation of the brain, Apoplexy, etc.

Epitome of Treatment.—

1. For the Acute Attacks.—Nux V. (*congestive Headache, with giddiness, Constipation*, etc.); Bell. (*with flushed face, heat of eyes, which also feel too large*); Bry. (*with vomiting of bitter fluids*); Glon. (*throbbing Headache*); Cocc. (*sick-Headache with much retching and but little, except water or mucus, vomited*); Ver.-Alb. (*sick-Headache with prostration, cold sweats*, etc.); Coff. (*nervous Headache with sleeplessness*); Cimic. (*nervous, hysterical Headache of women, especially at the monthly period, or consequent on its derangement or cessation*); Acon. (*Headache from Catarrh, with general deranged circulation*); Iris

(*copious vomiting, the ejected matter containing bile*). See also the Section on "Vertigo and Headache."

2. CHRONIC CASES AND BETWEEN THE ATTACKS.—Sulph., Sep., Calc., Ars., Nux V., Sulph.-Quin.; Zinc. (*with general nervous depression*).

ACCESSORY MEANS.—The patient should lie down in a quiet room with a subdued light, and be kept from every kind of disturbance, so that, if possible, sleep may afford relief. Rest and sleep are the most natural restorers. Hot tea or coffee, which act on the nervous system, often give considerable immediate relief, although the excessive use of these beverages predisposes to subsequent attacks. If pressure relieve, the wet bandage should be tightly bound round the head. Dr. Wilks, who had been a martyr to Sick-Headache all his life, says this is the only means of procuring relief on which reliance can be placed. This method, he thinks, is instinctive as it is universal, and has been used in all times. He quotes Shakspeare, who often illustrates the morbid states of the body, as well as the passions of the mind, and who testifies to the ancient practice here recommended. In the scene between Hubert and Arthur in *King John*, Arthur, when petitioning for the preservation of his eyes, says—

"When your head did but ache
I knit my handkerchief about your brows."

And in *Othello* we have not only the remedy for Headache given, but the cause. In the former was employed the handkerchief about which the chief interest of the play is centred:—

"DESDEMONA. Why do you speak so faintly?
Are you not well?
OTHELLO. I have a pain upon my forehead here.
DESDEMONA. Faith, that's with watching; 'twill away again;
Let me bind it hard, within this hour
It will be well."

During an attack, unless it is prolonged, entire abstinence from food is necessary; at least, only the slightest nourishment—milk-and-lime-water, plain soup, etc.—should be given;

copious draughts of hot water taken early often mitigate or shorten an attack.

Preventive Treatment.—The causes which predispose to or excite the paroxysm must be avoided, and the tone of the general health improved. Every case must be treated according to its individual peculiarities. *Tea* and *coffee*, although they sometimes give relief during a paroxysm, render the nervous system increasingly susceptible to the attacks, and we have known several patients enjoy complete immunity by abandoning these beverages. The general regulation of the diet, the adoption of out-of-door recreation, and of other hygienic measures pointed out in the first chapter of this work, will prevent or minimise the affection. In some cases, when attacks frequently occur, *change of occupation, scene, and climate* are necessary to break up the tendency. The climate selected should be dry and bracing, and walking- or horse-exercise taken daily.

101.—Sleeplessness (*Insomnia*).*

Sleeplessness is very frequently the accompaniment of some disease or disorder, and it is to be treated as one of the symptoms characterising it, which will disappear under judicious treatment of the primary malady. But when, night after night, a person lies awake for hours, either failing to get to sleep, or sleeping intermittently, or waking early without further repose, sooner or later serious results must follow. For inability to sleep is one of the most constant precursors and accompaniments of cerebral exhaustion and decay, is a premonitory symptom of insanity, and when persistent is a prominent cause of lunacy.

Physiology.—By past experimental research, Durham and Hammond have found that the brain is almost bloodless during sleep, that the rapidity of the circulation is diminished, and that whatever increases the activity of this circulation favours wakefulness. At a meeting of the British Association, Professor Ferrier stated that he had known animals fall

* See *H. World*, vol. xxv. p. 393.

sound asleep on losing a large quantity of blood, a proportion being of course drawn from the brain. At the same meeting, Dr. Fothergill affirmed that attacks of loss of consciousness are often found to depend upon an imperfect blood-supply to the brain, and are cured by the administration of remedies acting on the circulation and steadying the blood-pressure on the nerve centres. Dr. Carpenter thought that activity of the brain was the functional expression of the changes going on between the capillary circulation and the substance of the brain itself—a conclusion which, he said, was confirmed by Prof. Ferrier's recent experiments on the brains of animals. The conclusion to be drawn from this testimony of the first scientific men of the day, is that whatever increases the circulation of the blood to the brain occasions wakefulness, while whatever lessens the supply induces sleep.

Causes.—*Dyspepsia.*—No cause of sleeplessness is more common or less recognised than indigestion, or more properly speaking, untimely digestion. Late dinners, hot suppers, a hearty meal taken when the system is enfeebled by a hard day's work, the arrest of the process of digestion by taking something after the last meal has been eaten but not disposed of, occasion the dyspepsia which disturbs the rest. No doubt there are persons whose sleep is disturbed by acute Dyspepsia, by increased acidity, or by undue fluidity. But ordinarily such disturbance is due to the stimulus given to the circulation by the fresh blood which is consequent on the untimely completion of the digestive process. This completion is moreover delayed by the frequent use of intoxicating liquors with food, and by the indiscreet mixing of such liquors.

Excitation.—But while stimulants retard digestion, they also unquestionably excite the brain by quickening the circulation of the blood, and thus occasion sleeplessness. The stimulant acts upon the whole system and causes abnormal activity of every part. The error is aggravated by the quantity and variety of wines taken; and still further, by the addition of strong tea or coffee to the exciting liquids; for though their stimulus be of a different character, and affects other organs, there is still the excitation of the system of which the brain partakes. These drinks, too, without the

wines, are too stimulating to be taken by most persons towards bed-time. The smoking of strong tobacco late at night also often produces sleeplessness, especially after errors of diet. Strong odours, exciting the sensorium, as of flowers, perfumes, embrocations, etc., may prevent sleep. Excessive exercise, as in dancing; mental excitement, as in late entertainments, in amusements, in music; laborious brain-work; corroding care, trouble, and sorrow; all more or less stimulate the circulation of the blood, fill the vessels of the brain, and are causes of sleeplessness. All exciting passions have a tendency to prevent sleep. Children are frequently prevented from sleeping by their dreams; and these dreams are occasioned by the tales or threats of injudicious nurses, by irritation of the nervous system, uneasiness from teething, loaded bladder or bowels, or by too high a pillow.

Exhaustion.—This may be physical or mental, or both combined. It is a matter of frequent experience that body and mind may become so weary that it is impossible to sleep. By *vaso-motor parcsis*, increased flow of blood to the brain is produced. The abnormal condition thus occasioned is also often aggravated by dietetic errors. The satisfying of the appetite is not unfrequently neglected till the work is done, and then the sense of relief from the pressure of what *must* be accomplished, occasions desire for such reactionary stimulus as is gained by eating and drinking; the craving for food then leads to an excessive supply, and the stomach (tired like the rest of the organism), having considerable work thrown upon it, does it slowly and inefficiently, while the brain receives untimely stimulus, and sleep is driven away. Sometimes, however, the exhaustion is so great that there is no desire for food, and then, as insufficient, or "tasty" unsuitable food is taken, the exhaustion is not repaired by proper nourishment; the consequence is that the active brain is fully charged with blood, which should be more equally distributed through the system, and which would be drawn to the digestive organs, if a simple and suitable meal were appropriated.

Irregular Habits.—The habits which have just been referred to may well be regarded as "irregular," but there are others,

which, though they fall under that category, can hardly be said to be exhausting. They are, however, none the less foes to sleep. Rest having been disturbed for some nights by watching, and the habit of going to sleep at a particular hour being interrupted, irregularity is occasioned which may not in all cases be easily corrected. The practice of taking "forty-winks" after dinner, though not in itself objectionable if the authorised number be not exceeded, by undue indulgence and lengthening, may forestall the night's rest, and make it difficult to go to sleep. Then, the "careful soul" that "takes thought for the morrow," that broods over passing events, or calls up remembrances of the past, or indulges in forebodings of the future, is almost sure to lie awake for a considerable time. Some persons, too, go to bed with the idea that they cannot go to sleep, and they dwell on the idea, and consequently do not go to sleep. And besides these, there are other irregularities occasioned by different idiosyncrasies, more or less indicative of nervous inertia, which effectually banish sleep.

TREATMENT.—*Coffea.*—Mental fret and friction; patient "cannot sleep for thinking;" excitation of all the organic functions; *agreeable excitement; playfulness; wakefulness of children and old persons.*

Hyoscyamus. — Light sleep broken by dreams; nervous irritability; *excitement with depression of spirits;* disagreeable dreams.

Chamomilla.—Peevish excitement of children; *nervousness, palpitation from anger,* vexation, or the use of coffee.

Nux Vomica.—Sleeplessness consequent on *errors of diet,* excesses, the use of alcoholic drinks, coffee and other *stimulants;* on immoderate strain of the nervous system by haste and worry of business; on late hours of study; indigestion; constipation.

Aconitum.—Wakefulness from *fright,* agitation, or anxiety, with *febrile symptoms;* teething irritation.

Belladonna.—Great desire but inability to sleep; fear; frightful visions; crying without cause; heat and *throbbing in the head,* pain or redness of the eyes; puerperal sleeplessness.

China.—Wakefulness of convalescents; disturbing dreams

causing anxiety and starting, which remain for some time after waking; *morbid effects of tea.*

Lachesis.—Feeling of *intense weariness,* worse in the morning; palpitation; confused thoughts; jactitation all night, with extreme nervousness; melancholy.

Gels., Glon., Ign., Op., Puls., may in some cases be required.

Dr. Stanley Wilde says *Cypripedium* and *Scutellaria* are similarly acting remedies, suited to mild forms of excitement, particularly in sensitive women and children.

Phosphorus.—To meet the ill-effects of brain fag.

Coca Erythroxylon.—Nervous exhaustion, specially indicated by a sense of shock in the brain, awakening the sleeper.

Avena Sativa.—Brain and nervous exhaustion from overwork and worry, restlessness and irritability.

Arsenicum.—Indicated by restlessness, anxious apprehensiveness, bad dreams, much loss of flesh and emaciation, with general physical and nervous prostration.

Kali-Brom. and *Secale-Cor.*—Sleeplessness in anæmic cases following great hæmorrhages. A valuable auxiliary for promoting sleep in dyspepsia is the stomach compress, applied at night; also the sitz-bath.

Dr. J. H. Clarke recommends the following:—

"*Cinnabar* (sleepiness during day, sleeplessness at night); *Act.-R.* (sleeplessness and restlessness in nervous persons, accompanying uterine affections); *Verat.-Vir.* (dreams of water); *Bry.* (anxious dreams of business transactions during day); *Verat.-Alb.* (whining in sleep); *Carb.-Veg.* (moaning, weeping, starting in sleep)."

Accessory Means.—The removal of the causes or conditions which induce sleeplessness; avoidance of whatever occasions Indigestion; abstinence from unnecessary excitement; simple, moderate, and opportune supply of whatever is needful to sustain the system; regular habits with respect to going to bed; fixing the thoughts on those subjects which are quieting and restful. "He giveth His beloved sleep" is one of the blessings promised to the righteous, and nothing is more soothing, more comforting, or more likely to produce sound refreshing

sleep than a portion of Scripture read just before going to bed. The daily evening Psalms, some suggestive devotional book, Spurgeon, "The Daily Round," or "The Imitation of Christ," may be recommended. By dwelling upon cheerful religious thoughts the mind is diverted from earthly cares and troubles. When retiring, the stomach should neither be full nor fasting; neither the head hot, nor the feet cold. Brushing the hair, friction of the skin, rubbing the palms of the hands or the backs of the arms, will have a quieting influence on some persons. Soothing sounds will lull adults as well as children. An occasional warm bath at bed-time has a soothing effect; a foot-warmer in bed will correct the coldness from which some suffer in the winter, but it should only be resorted to occasionally. A low pillow, a hard pillow, or a hop pillow may be conducive to sleep. A plain biscuit after lying awake some time will bring relief. If the air of the bedroom be *dry*, and there is a sense of stifling, let the window be opened at top; or if warmth as well as moisture in the air be desired, let steam escape into the room from a boiling kettle. Walking, riding, or driving in the open air; change of society, of scene, of air (if it be pure and bracing), will prove remedial. A good walk two hours before bed-time is beneficial in sthenic cases. For the weak or anæmic, especially women who have been rendered so by hæmorrhage, a dose of alcohol at bed-time is frequently desirable; spirits are better than wine; whisky is better than other spirits. *Bromide of Potassium* and *Hydrate of Chloral* are favourite hypnotics; but they should be used very carefully, and only exceptionally.

102.—Brain-fag.

Mental exhaustion or *Brain-fag* is a common nervous affection of adult life. Competition presses upon all classes of society; the scholar, the professional man, the merchant and the tradesman, are alike goaded by its spur to exertions which frequently exhaust the nervous resources. Brain-work is healthy, and those engaged solely in mental pursuits,

not involving excessive anxiety, are as healthy as those engaged in most favourable out-of-door employments; and the better food and hygienic conditions of modern life render possible an amount of labour which our forefathers could not have performed. But, with all our advantages, modern brain-work involves such intense application, circumspection, promptitude, responsibility, and continuous anxiety, that it produces more rapid exhaustion than the quieter life of a past generation. For it is not simple brain-work, but excitement or brain distress, which causes brain degeneration or disease.

Symptoms.—The symptoms come on insidiously; excitability, bad temper, or proneness to tears, being frequently noticed by the patient's friends before he himself observes any change in his condition. Sleeplessness, susceptibility to cold, Acne, or Eczema, in different parts of the body, Neuralgia, inability to walk without fatigue, and heaviness in the legs, palpitation, nervousness, head- or back-ache, loss of appetite, creeping sensation down the spine, loss of memory, being obliged to force the brain to remember, are subsequent symptoms. The one generally first noticed by the patient, is, loss of virile power.

In cases further advanced, the mental or moral equilibrium is lost. Hobbies are taken up; an amiable man becomes bad-tempered; a temperate man craves for intoxicating drink. A copious discharge of phosphates in the urine, and profuse night-sweats may supervene. The patient becomes melancholy, the senses dull, and things that once gave pleasure do so no more. The disease may culminate in premature old age, or lead to self-destruction.

Causes.—The chief cause is *over-work*. Youths at college and boys at school frequently suffer in some degree from prolonged application to their studies. It is, however, where worry, or sexual excesses, are united with over-work that the most pernicious results are induced.

Treatment.—*Phosphorus*.—In Brain-fag, this remedy is a most important one. The brain is deprived of its *Phosphorus*, and a supply, as food and medicine, is essential to a cure. A low dilution may be be taken after food twice or thrice daily.

Nux Vomica.—Constipation, headache, unrefreshing sleep,

irritability of temper, and bilious derangements indicate this remedy.

Phosphoric Acid.—To be preferred when there is impaired virility, cold sweat or profuse night sweat, great fatigue on exertion, or loss of hair.

Ignatia.—Alternate excitement and depression; tendency to tears on slight cause; sleeplessness; fearfulness.

The following epitome of treatment is recommended by a recent authority:—

"Ac.-Pic. (*great indifference, lack of willpower to undertake anything*); Æthus. Cynap. (*distracted, incapable of mental exertion*); Anacard. (*loss of memory, 'funk' before an examination*); Calc.-Phos. (*pale subjects, with tendency to large tonsils*); Silic. (*loss of memory from over-work, chronic headache and nervousness, sufferings aggravated by cold, relieved by warmth*)."

Accessory Means.—Absolute rest from mental employment is not essential to recovery. A change of occupation, and a longer allowance of sleep and quiet, will produce the desired result.

A cold bath in the morning, followed by friction till the body is in a glow; agreeable company, and generous diet, are beneficial. *Fish*, including oysters, lobsters, and other shell-fish, are particularly suitable for patients suffering from brain-fag.

103.—Simple Melancholia (*Melancholy*).

Definition.—"Disorder of the intellect, with depression, often with suicidal tendency." It consists essentially in a state of mental pain; in a vague feeling of anxiety, gloom, or depression. Life has lost its interest in the present, and its hope of the future.

This is one of the commonest mental derangements, and bears about the same relation to cerebral disease that Dyspepsia does to Gastritis or Inflammation of the liver. A large number of suicides are found, on judicial inquiry, to have suffered from Melancholia; yet these represent only a

fraction of the number of persons around us who suffer from anguish and bitterness, despondency and hopelessness.

Symptoms.—In a large number of cases the misery is known to the patient alone. He is rational and intelligent, labours under no delusions, but is depressed by a tormenting self-accusation and poignant grief, which sometimes drives him by a sudden impulse to suicide, or other violent act. He generally becomes taciturn, quiet, and uninterested in what is passing around. The mind is wedded to its woe; when sympathy is proffered it is rejected, comfort and consolation are refused. Frequently there are marked periodic exacerbations, the patient wringing his hands, and sobbing in the most violent distress, without any exciting cause. There are also remarkable hesitancy, inactivity, and paralysis of the will. Irritability is also sometimes present; when it becomes excessive and associated with fretfulness, acute melancholia is imminent.

Sleeplessness, disturbed dreams, pallor of the complexion, dilatation of the pupils, tremulousness and redness of the tongue, failure of appetite, dull pain in the head, and feebleness of the heart's action, are frequently observable; virility or uterine functions are suspended.

In chronic cases, the mind, warped by the tension of grief, loses its proper contour. Judgment is dull, perception vague, apprehension enfeebled, and thinking slow. Former studies are distasteful, and the whole round of life seems disproportionate and distorted. Change of affections, restlessness, religious dread, and delusions ensue.

Treatment.—*Aurum.*—*Suicidal* melancholy.

Platina.—*Religious* melancholy, and that consequent on deranged *uterine* health; apprehension of death.

Arsenicum.—Restless depression, with *anguish.*

Iodine.—Sense of discouragement, *want of spirit.*

Mercurius.—Fretful irritability, with *nervous tremors.*

Ignatia.—Recent cases, traceable to psychical impression, as *grief*, fright, disappointment.

Phos.—Nervous exhaustion.

Puls., *Sulph.*, *Bell.*, or *Lach.* may also be required.

"Act.-Rac. (*melancholy with nervousness, restlessness, and*

sleeplessness); Verat.-Alb. (*anguish, vital depression, cold sweat on forehead*); Opi. (*melancholy, nervousness, drowsiness, with constipation*); Plumb.-Ac. (*religious or other melancholy, with very obstinate constipation*); Tarent. (*prostration, unappeasable restlessness, convulsive trembling*); Spig. (*with pain at the heart*); Con. (*depression, timidity, aversion to society; from sexual causes, as enforced abstention*); Nat.-Mur. (*sadness during the menses, with palpitation on lying down or after food*); Helleb. (*melancholia after Typhus fever, and in girls at puberty*)." —*J. H. Clarke.*

Accessory Means.—Whatever gives vigour to the body and mind must be adopted. Pure air, good food, simple habits of life, cheerful society, objects and subjects that please the mind and divert it from its idiosyncrasies, must be secured. The shower-bath or cold douche, for a brief time, is often advantageous when a favourable reaction follows.

104.—Dementia (*Dementia*).

Definition.—Disorder of the intellect, characterised by loss or feebleness of the mental faculties. There is gradual degeneration and decay, with either maniacal perturbation or melancholic depression.

Symptoms.—The first signs of the disease which terminates in fatuity are, failure of memory, confusion of ideas, loss of mental power, the employment of inaccurate terms for the expression of ideas, slight hesitancy of utterance, inversion of the grammatical order of sentences. The emotions also become narrow, selfish, blunt, unaffected by the joys or sorrows of others. Deep or lasting feeling is not manifested, but comparative indifference to any but personal considerations is the prevailing condition of the mind. Morbid propensities are occasionally exhibited. The physical symptoms are, gradual diminution of expression in the countenance, muscular tremor and weakness, causing uncertainty of step, unsteadiness of gait, stoops of the body, and ultimately passing into Paralysis. Meanwhile "the vacant and puzzled

look, the lack-lustre eye, the weak smile, the meaningless laugh, betray the vacuity of mind."

Causes.—Sunstroke, fever, Brain-fag, Melancholia, Mania, old age (senile dementia). See also Section on "Old Age and Senile Decay."

Treatment.—Ac.-Phos., Nux V., Anac. (*from Brain-fag, sexual excesses, or old age*); Zinc. (*trembling and jactitation of the limbs*); Hell. (*stupor and indifference*).

The dement should be carefully nursed and tended, his health preserved, and his weaknesses indulged with the fostering love for one who has reached a second infancy.

105.—Mania—Insanity (*Mania*).

Definition.—Disorder of the intellect, characterised by general delirium.

In the present section it is our intention to treat of that disorder of the nerve-centres which causes abnormal psychological or emotional phenomena, with excitement, delirium, or raving madness.

Inasmuch as *Idiocy* is due to congenital malformation or deficiency of the sensorium, we have not included it in the Sections on disorders of the intellect.

General Paralysis of the Insane is essentially a chronic Meningitis, the chief symptoms of which are gradual and complete loss of both mental and physical powers (see Secs. 73 and 86).

Pathology.—The seat of Mania is undoubtedly in the cerebral substance; for though in some cases no lesion of the brain can be discovered, in others cerebral lesions are not only discoverable after death, but may be more or less clearly diagnosed during life. Recent observations show that the most essential change is a degeneration of the nerve-cells, causing shrinking, *condensation*, increased weight, softening or chronic inflammation of the brain. The urinary secretion is somewhat modified, the blood deficient in fibrine, and there is in severe cases a dyscrasia which leads to the formation of blood-tumours in the ear. It is, however, only the

General Paralysis of the Insane that has a definite pathology (viz., the inflammation, degeneration, and atrophy of the grey substance of the brain); in other cases, the physical changes are so slight that we can only account for the symptoms by the excessive delicacy of the organ chiefly involved.

Causes.—*Predisposing.*—Mania is without doubt hereditary; —the ancestral taint may be traced in nearly fifty per cent. of all cases. It can also be traced to marriages between near relatives, to syphilitic or scrofulous diathesis in the parents, to their drunken or dissolute habits. It also has its origin in defective nutrition of the brain, insufficient refreshing sleep, defective mental education and training, asceticism, morbid religiousness, or sensualism.

Exciting.—Some are moral: undue religious excitement, prolonged intellectual exertion, blighted ambition, disappointed love, immoderate grief, fright, pecuniary losses. Others are physical: injuries of the head, fevers, Epilepsy, Sunstroke, retrocession of Small-pox, Erysipelas or Gout, local irritation, abuse of alcohol, tobacco, opium, sexual excesses, especially masturbation, and abuse of mercury.

Insanity occurs most frequently when the nervous system is severely taxed, and when the passions are in greatest activity—from the age of twenty-five to fifty. Men and women suffer in equal proportions, but the single are more frequently affected than the married.

Symptoms.—The most manifest symptom is a change in *the man;* he is fitly described as being "not like himself." Insomnia, headache, and abeyance of the sexual functions are among the earliest physical symptoms. Loss of memory, impatience, irritability, Brain-fag, neglect of family and business, distrust of relatives, fits of passion, despondency, taciturnity, and change of moral character, are premonitory. When the disease gains height, delirium and reason alternate with each other, strange and extravagant acts are committed; the delirium becomes general, the fury extreme; movements are incessant, angry, furious, destructive; the noise of laughing, reciting, shouting, howling, is excessive. It is then that the insane destroy themselves, either by accidental self-

injury or as the expression of despair. Maniacs frequently soon become weak and emaciated, in consequence of their violent physical exertions, and of their reluctance to take food. The first two symptoms of recovery are, a desire for food, and refreshing sleep. The Mania that does not terminate in recovery or self-destruction, may become complicated with Epilepsy, and is then hopeless, or may end in Dementia and Paralysis.

TREATMENT.—*Anacardium.*—Rapid loss of self-reliance, memory, and *mental vigour.*

Agaricus.—Heaviness and languor of the lower extremities; merry, excited mood.

Phos.-Acid.—Depression of spirits, and disorder of the mental faculties, particularly when due to *Brain-fag* or *sexual excesses.*

Aurum.—*Suicidal tendency*, religious mania, sexual excitement; determination of blood to the brain; Hemiopia; *great depression*, with congestion of the head and liver.

Belladonna.—Sleeplessness, delirium, mania; intolerance of noise and light; *headache, flushed face;* sparkling, brilliant eyes; *dilated pupils;* tottering gait; *hallucinations*, both visual and auditory; phosphatic urine. Generally requisite in hyperæmia of the brain.

Arsenicum.—Intermittent symptoms or periodic exacerbations.

Hyoscyamus.—*Delirium, with hallucinations*, but with little determination of blood to the brain. Twitchings, startings, and muttering; dryness of mouth, dilatation of pupils, and giddiness; melancholy; silent mood.

Iodium.—Anxiety and despondency, discouragement and dispiritedness; obscuration of vision, illusions of the sense of touch, partial deafness. (Particularly suitable for *strumous* patients.)

Mercurius.—*Nervous irritability*, slight causes producing great impressions; fretful, peevish, irritable temper; sleeplessness; loss of memory; delirium; apathy.

Nux Vomica.—Giddiness and reeling as if drunken; intolerance of light and sound, rushing noises in the ears; constipation, *irascibility;* drowsy in evening, and awake early in the morning. Particularly suited to active business men, who

have *much mental occupation* and little open-air exercise, and who are addicted to wine, coffee, tobacco.

Zincum.—Chronic headache, cerebral depression, *Melancholia*, progressive paralysis, Amentia.

Stramonium.—*Furious* delirium, with hallucinations. Excessive talking, singing, dancing, striking, biting, shrieking. The pupils are dilated, the eyes glisten, and the whole aspect is *furious*. Or there may be a *besotted expression* with convulsions, paralysis, and difficult deglutition.

Veratrum Alb.—Anguish of mind; vertigo with obscuration of sight; collapse of pulse.

Can.-Ind.—Mania with exalted ideas.

Accessory Means.—If a person of unsound mind cannot be removed to a lunatic asylum, it is generally desirable to *remove him at once from his house*, and from those surroundings which are connected with the origin of his malady. He is thus taken from those objects and influences which have occasioned or may aggravate his disease. It is almost impossible to treat an insane person successfully in his own house, among children and servants over whom he has been accustomed to exercise authority, and where he may frequently find new excitement of his anger, or new stimulus for his delusions. His mental aberrations altogether preclude the patient's right to have his own way; it is therefore necessary to remove him from the associations in which the right may seem to be a valid one, to other associations where he must exercise some self-restraint in subjection to the will of another. An entire change, like the one recommended, will alone sometimes lead to recovery. In an early stage of the disease, quiet *travelling* amidst beautiful scenery, and in a bracing climate, affords beneficial recreation.

Watchfulness is at all times required, but it should be as much as possible unobserved, certainly not obtrusive. An attendant should remember that as the patient is unable to take proper care of himself, the responsibility of his ward's safety rests with him; he should therefore never be negligent. As far as possible, self-control should be encouraged, and moral rather than physical restraint exercised. But, in cases of violence, simple mechanical restraint is absolutely essential,

indeed, is humane, lest the patient should injure himself or others. When there is excitement without violence, the solitude of a darkened, quiet room, with few objects in it to occupy the mind, will be consonant with the feelings of the sufferer, and will have a soothing influence on his Mania. His ordinary rooms should be light, airy, cheerful, with pleasing objects around, such as flowers, pictures, ornaments, etc. Provision should be studiously made for his *amusement;* his known innocent tastes should be gratified. Controversy on the subject of his delusion is to be avoided; no argument will convince, opposition will only irritate; quiet dissent or doubt will best meet the expression of his deranged ideas. The attendant should endeavour to secure the confidence of his ward, and should keep every promise that is made.

With improvement in health, the patient should have assigned to him some occupation which will employ both his hands and his mind, and furnish healthful exercise. There should be no time for idleness or reverie. Music and recreations, indoors and out, should be interchanged with work. Some simple instruction may often be given. The mind may be strengthened by education. Only gradually should the attention be directed to objects and subjects which formerly engaged it. Friends may be seen occasionally. Domestic and professional matters may be casually touched upon. But the return to complete self-control is usually slow, and the mind remains enfeebled for some time after apparent recovery, so that haste will only retard true progress.

Heroic measures are now generally abandoned, and are worse than useless. Leeches, blisters, setons, counter-irritants, antiphlogistic treatment, and purgatives, are always injurious; the latter may be superseded by the use of the enema.

"General bloodletting is now rarely, if ever, used; even in the most acute and seemingly sthenic insanity it is not simply useless, but it is positively pernicious. Violent symptoms may abate for a time, but the disease is very apt to become chronic, and to pass rapidly into dementia" (*H. Maudsley, M.D.*).

Low diet is likely to increase the exhaustion, and with it the excitement. Wine is often advantageous, and a threatened attack of Mania may often be warded off by generous diet and

stimulants. Errors of digestion and secretion may be corrected by the use of appropriate remedies, or by change of diet.

Clothing should be warm and fit easily, for the insane are often cold, and moreover are susceptible to inflammation of the respiratory organs.

The cold douche, or shower-bath, is useful if reaction speedily follow; but it should not be used beyond two or three minutes. The prolonged use of either the shower-bath or cold bath is always injurious. For an acute attack of Mania, a warm bath for about half an hour has a soothing effect, and is often followed by sleep. Its efficacy may be much increased by the addition of mustard, sufficient to redden the general surface of the body. The warm bath is, however, chiefly beneficial in recent cases. Packing in a wet sheet is sometimes equally serviceable, and is generally grateful to the patient.

CHAPTER IV.

Diseases of the Eye.

106.—Simple Ophthalmia—Conjunctivitis.

Ophthalmia is a general term for Inflammation of the conjunctiva—the mucous membrane which lines the eyelids and the front part of the eyeball. Formerly, when the eye and its diseases were less understood than they are at present, nearly all inflammatory affections of the organ were included under this term. There are several varieties of Ophthalmia, the most frequent being those described in this and the following Sections. First, *Simple Ophthalmia.*

Simple Ophthalmia differs in degree, rather than in form, from the variety described in the next Section. There is generally some itching, and a sensation of heat, or a feeling as of sand under the lids. We have introduced this form of Conjunctivitis to suggest the necessity of an ocular inspection of the eye whenever a simple Ophthalmia does not quickly

yield to treatment; for the sensation of a foreign body in the eye in such cases sometimes turns out to be correct.

Causes.—Exposure of the eyes to dust, smoke, impure air, cold winds, glare of light, exertion in using the eyes on too near objects, or some other local cause.

Treatment.—*Arn., Acon., Bell.* (See "Leading Indications for Ophthalmic Medicines," and "Foreign Bodies in the Eye.")

"In almost all *acute inflammatory* conditions of the eye frequent bathing with *hot* water is advantageous. From cold or injury a lotion of *Boracic-Ac.* (eight grains to the ounce), to be kept applied till the pain has subsided. Should this fail, *Euph.* 1 internally, and a lotion of *Euph θ* (ten drops to the ounce). *Ant.-Tart.* (*pustular inflammation*)."—*J. H. Clarke.*

107.—Catarrhal Ophthalmia (*Ophthalmia cum catarrho*).

Definition.—Inflammation of the conjunctiva and meibomian follicles, accompanied by the discharge of a mucous secretion and by swelling and agglutination of the eyelids.

Symptoms.—A pricking pain, especially on moving the eye, as if there were sand or a little fly under the lid; a sense of stiffness on moving the lid; sensitiveness of the membrane to cold air; watering of the eyes, and a secretion of mucus, gluing the lids together in the morning; bright redness of the conjunctiva. The redness in this form of Ophthalmia consists of bright-red, tortuous, interlacing lines, which are most manifest around the circumference of the globe, and fade as they approach the cornea. It is thus to be distinguished from Inflammation of the *sclerotic* coat of the eye as seen *through* the conjunctiva; in which disease the lines are violet-coloured, straight, and radiating from the iris. The activity of the pupil shows that the inflammation is only superficial, and that the iris is not affected by it. The discharge is sometimes abundant, but less so than in the purulent form; it is also slightly contagious, more or less so according to the mixture of pus globules in the mucous discharge. The lids have a gummy, sticky appearance, and the patient complains that

they adhere together in the morning with the dried secretion. They are also often swollen. The most marked symptoms are—*redness*, an *increased discharge*, and *pricking pain;* the last is no doubt due to the irregular distention of the vessels, which disturbs the part mechanically, just as dust or a fly might.

Both eyes suffer; and in this respect Catarrhal Ophthalmia may be distinguished from Gonorrhœal Ophthalmia, which is usually, at least at first, confined to one eye.

Causes.—Vicissitudes of temperature, easterly and north-easterly winds, cold and damp, especially draughts of cold air.

The disorder is sometimes epidemic, the members of a family, or the families of a neighbourhood, being successively troubled with it, in spite of precautions against contagion.

Treatment.—*Acon.*, *Bell.*, *Euphr.*, *Merc.* (See "Leading Indications for Ophthalmic Medicines," p. 445.)

Accessory Means.—Exposure to currents of cold and damp air should be avoided, and if the weather is inclement during an attack, the patient should remain in a room of uniform temperature. A piece of lint, wetted in tepid or cold water, as may be most agreeable to the patient, should be laid over the eye, and covered with oiled silk, on retiring to bed. If the lids are agglutinated in the morning, they should on no account be opened without being first moistened with tepid water or saliva; but any gumming together may be prevented by smearing the lids at night with a little cold-cream or olive-oil, or by covering them with moist lint and oiled silk, as already recommended. As long as the eyes remain sensitive, they may be protected by plain blue or smoke-coloured glasses; they should be used with extreme moderation; crowded rooms, or air poisoned by tobacco-smoke or other impurities, should be avoided. The food should be simple, nourishing, and digestible.

Preventive Means.—Persons predisposed to Ophthalmia should guard against all needless exposures during the prevalence of *easterly* and *north-easterly* winds. In reading, writing, or when using the eyes on fine work, the morning hours should be chosen, when the light is growing brighter. The habits should, therefore, be *early and regular;* the bene-

ficial influence of out-of-door air should be daily enjoyed, and bathing practised as directed in Section 32.

108.—Purulent Ophthalmia (*Ophthalmia purulenta*)—Contagious Ophthalmia.

Definition.—Inflammation of the conjunctiva accompanied by Chemosis and by considerable secretion of mucus and pus, which mingle with the tears.

At the commencement, and when the attack is mild, it may be mistaken for catarrhal Ophthalmia; when severe it is similar to gonorrhœal Ophthalmia.

Symptoms.—These are more violent, destructive, and rapid in their course than those of either *catarrhal* or *strumous* Ophthalmia. The tingling sensations first experienced (usually in the evening) are soon followed by acute pains, which extend through the eyes to the temples and brain itself; the eyelids adhere, the flow of tears is changed into a profuse secretion of pus; lids are inflamed, swollen, and vascular; and there is almost total loss of vision. If the disease go on unchecked the cornea becomes cloudy, then ulcerates, or partly sloughs away, portions of the iris may protrude, and the eye is destroyed. There are also constitutional symptoms, such as Headache, nausea, quick pulse, hot skin, etc.

Causes.—Sudden extreme alterations from heat to cold: the irritation of sand in the eyes; *metastatis* of Measles, Scarlatina, Small-pox, etc.; also endemic and epidemic influences, as the crowding together of persons in ill-drained, dirty, badly-ventilated, and insufficiently-lighted dwellings.

Egyptian, or *contagious*, *Ophthalmia* arises when people are crowded together in filthy habitations, and was first brought into this country from Egypt by our troops, early in the present century; hence its name. It spread so destructively, that, after the Napoleonic wars, England alone had to provide for more than five thousand blind, invalided soldiers. Diseases of the eye are still a source of very frequent inefficiency in the army; hence the term "military Ophthalmia," which is characterised by grey or vesicular granulations and rapid puru-

lence. Discharged soldiers affected with Purulent Ophthalmia have often been the means of propagating the disease among civilians. There are, however, many local influences which render the disease endemic in other places than Egypt. Overcrowding, defective ventilation, and want of cleanliness, are potent causes of its prevalence. It is very common among the Irish poor. It is also a common disease in workhouses, pauper schools, convict establishments, and other public institutions, where numbers of persons occupy the same dormitories and lavatories, are frequently over-crowded, and subject to defective hygienic arrangements.

Mr. R. B. Carter has laid down three important propositions regarding *Purulent Ophthalmia*. The first is that the disease is very *actively contagious*, and that it continues contagious for a *long time*. The contagious matter is the secretion from the lining membrane of the eyelids, which passes along the tear-passages into the nostrils, and, with every expiration, sends into the atmosphere a spray of contagious particles. The period of contagiousness is often very protracted; for until the eyelids are quite well, the irritation of a particle of dust, or of an insect, or even some systemic disturbance, may reproduce a secretion of the most violent nature.

The second proposition is, that the magnitude of the evil is to be measured by the *multitude of the sufferers*, and the *duration of the cases*, rather than by the immediate effects of the acute symptoms. The gravest results, in the aggregate, are produced long after the acute stage has subsided, by the "smouldering embers" which persistently remain. These "embers" consist of a chronic thickening or fleshiness of the lining of the eyelids; and as long as they remain uncured the form of the eyelids is altered so that they *fail to fit with accuracy* the surface of the eyes, cease to protect them from dust, etc., and give rise to pain or uneasiness with every movement of the eyelids.

The third proposition is that, before it can spread in the ordinary manner, there must be an *antecedent morbid condition*. This condition is not one of mere ill-health or debility, either inherited or acquired, but is manifested by the development, in the lining membrane of the eyelids, of certain little bodies

which are not unlike grains of *boiled sago*, and which in technical nomenclature are known as "follicular granulations." They are concealed by the eyelids when these are in their natural position, and when once Ophthalmia is set up, they are soon concealed altogether by the swelling and increased redness of the parts in which they are found. The prevalence of these "follicular granulations" is the necessary antecedent of an epidemic of Contagious Ophthalmia. They furnish the soil in which the seeds of disease germinate; and, if the soil is wanting, the seeds either remain quiescent, or, at most, produce disease of a comparatively harmless character. Drs. Frank, Marston, and Welch, further established that, when a large number of persons are brought together in close proximity, and are exposed to insanitary conditions of living, they become the subjects of these sago-like grains, so that their presence or absence affords a delicate test of the sanitary state of a school, regiment, or any similar community. In a regiment, the proneness to the development of follicular granulations is found to decrease as life advances—that is, to be much greater in young soldiers than in old ones, and by a parity of reasoning, it is assumed to be greater in a community of children than in a community of adults. Speaking broadly, follicular granulations may be regarded as enlarged glands, such as are sometimes seen in feeble or scrofulous children. Just as a child will not have scrofulous Abscesses in its neck unless glandular enlargement has first existed, so a child will not have Purulent Ophthalmia unless follicular granulations have first been developed in his eyelids. In this fact, therefore, we possess a clue to the prevention of the disease.

Treatment.—*Zinc.*, *Arg.-Nit.*, *Hep.-S.*, *Merc.*, *Ac.-Nit.*, *Phos.*, *Rhus Tox.*, *Sulph.*; and during the inflammatory stage, *Acon.* The first two may be used locally as well as internally. "The eye to be kept scrupulously clean with a Borax wash (ten grains to the ounce)." (See "Leading Indications for Ophthalmic Medicines," p. 445.)

Accessory Measures.—Iced-water compresses, and *Acon.*, render the use of leeches wholly unnecessary. If but one eye is affected, the other should be bandaged as a precautionary measure. The strictest cleanliness is also necessary.

PREVENTION OF THE SPREAD OF PURULENT OPHTHALMIA.—As the matter from an affected eye applied to a healthy one will produce a similar disease—by the use in common of towels, basins, etc., and even by infinitesimal particles in the air—the diseased should be completely isolated from the healthy, and each person use his own towel, sponge, etc. Even bedding has spread infection, so that pillows and mattresses should be thoroughly cleansed.

109.—Purulent Ophthalmia of Infants (*Ophthalmia infantium purulenta*)—Ophthalmia Neonatorum.

This disease is closely allied in its main symptoms to *Purulent Ophthalmia* in the adult, except as it may be modified by the undeveloped tissues and rapid growth of the infant organism; but it is usually more severe. It is very destructive when allowed to run its course uncontrolled, and still more so when improperly treated; it is, however, strikingly amenable to proper remedies and general treatment. Notwithstanding this amenability, it is the most common cause of blindness in childhood among the poor of large towns.

SYMPTOMS.—Usually on the next or the second day after its birth, the infant's eyelids are noticed to be a little swollen, the ocular conjunctiva is slightly reddened, and if the lower eyelid is drawn down so as to expose its inner surface, this also is found to be unduly red, and perhaps a flake or two of mucus is noticed on the loose folds of the membrane where it joins the eyelid and the eyeball. By the following morning, the conjunctiva is much redder, it has also become slightly œdematous, and it exudes an abundant mucus; the swelling and redness of the eyelids are also greater. By the end of the day, the Dropsy of the conjunctiva (*Chemosis*) is often so great that the distended membrane overlaps the border of the cornea and bulges between the distended eyelids. The discharge is now purulent. The child evidently suffers much; it is fretful, restless, and cannot sleep. If the intensity of the Ophthalmia does not soon abate, the surface of the cornea loses its polish, it sheds its epithelium, the lamellar tissue

becomes whitish-grey, sodden-looking, and opaque, it then sloughs and opens the anterior chamber, on which the aqueous humour, followed by the iris, gushes out. Upon this the lens, unsupported in front and pressed upon behind, is pushed forwards against the back of the cornea. When the corneal breech is small and the protruded piece of iris is not large, the eye is not necessarily lost. Often the exposed iris inflames, it becomes thickened and coated with exudation, granulations spring up in this and also from the edges of the corneal opening, the hernia shrinks, and there results a scar, technically called a Leucoma, in which the iris is often entangled. A Leucoma does not necessarily involve the iris. On the contrary, the term is most generally applied to the *scar* of a Corneal Ulcer when it is *dense*, and the term Nebula is used when the scar is *faint* and has resulted from superficial ulceration. Although very disfiguring, such a scar—when its edge is definite, and when it does not overhang the whole area of the pupil, but leaves part of this unobstructed—is not incompatible with useful sight (*J. W. Hulke, F.R.S.*).

While the infant is thus suffering locally he is restless and feverish, and there is general wasting of the body. At the height of the disease, the lids are red and swollen; but when the cornea has given way, they are of a dull livid colour, and the swelling subsides.

At first, the disease may not assume great intensity, and consequently may be overlooked in its early stage; or it may be regarded as a cold in the eyes, and expected soon to pass away; as a consequence, extensive and often irreparable mischief results before treatment is commenced.

Causes.—The most common is direct inoculation during birth of the infant's eye with a puriform vaginal discharge, of a leucorrhœal or gonorrhœal character. Contact of the ocular conjunctiva with the products of a simple leucorrhœa is sufficient to cause an attack of suppurative Ophthalmia; at the same time, it is probable that infantile purulent Ophthalmia, consequent on gonorrhœal inoculation, is, *cæteris paribus*, more acute than that induced by Leucorrhœa. Neglect of cleanliness; exposure of the eyes to a hot fire, or too bright a light; infection from a child suffering from the same disease;

irritation of the conjunctiva by various substances with which children are sometimes washed just after birth—soft soap, spirits, etc., may be the baneful irritants. The condition of the infant may act as a *predisposing* cause. Hence the disease is most common in infants prematurely born, in weakly children, and in those who are exposed to bad air, cold, and are imperfectly nourished. The cornea of a weakly, puny infant offers less resistance, and more readily sloughs, than that of a healthy child.

Remedies.—*Argent.-Nit.*—This remedy may be considered specific, and if administered every three or four hours, with strict local cleanliness, will generally suffice to cure the disease. The local use of this drug, or of alum-water, as prescribed further on, may generally be dispensed with. The solution should be freshly prepared and not used in trituration.

If special symptoms seem to require other internal medication, one of the following remedies may be administered alone or in alternation with *Arg.-Nit.*

Bell. (ext. and int.), intolerance of light. *Acon.*, febrile symptoms. *Merc.-Cor.*, profuse purulent discharge; scrofulous children. *Ars.*, if the cornea is ulcerated. *Sulph.*, tardy cases, and to prevent relapse. See "Leading Indications for Ophthalmic Medicines," p. 445.

Local Treatment.—*Alum-water.*—Mr. Hulke states that the treatment which has been followed with much success at the Royal London Ophthalmic Hospital, for more than a quarter of a century, consists in the frequent use of alum-water (generally grs. vi. ad. ʒj. aq. dest.). This should be used every two or three hours at first, but as the Ophthalmia yields, less frequent application will be necessary. This gentleman writes: "If you employ alum-water in the way I have described, you will rarely have to regret the loss of an eye. Such an occurrence is quite exceptional, and it seldom happens unless the cornea is already sloughing when the child is first brought to you. Implication of the cornea does not necessitate the discontinuance of the astringent remedy; its use should be persevered in, because in the speedy arrest of the Ophthalmia lies the best hope of averting or limiting the destruction."

Nitrate of Silver.—Some surgeons prefer, when the disease

is intractable, a change from alum to nitrate-of-silver collyrium (grs. j.-iiij. ad. ʒj. aq. dest.); one or two drops of this solution to be let fall into the eyes, morning and night, after carefully removing all discharge with tepid water and a small sponge. The change often acts beneficially when the ulcer is tardy. Cold compresses, immediately applied, will lessen the consequent irritation.

In most cases, however, the Alum-water, or Nitrate-of-Silver, lotions may be omitted, and a rapid and permanent cure will result from the medical treatment already prescribed, combined with simple local cleanliness.

Accessory Means.—These consist essentially in the observance of *great cleanliness*, the eyes being gently sponged or syringed out many times a day to remove the discharge. Now, as the necessary thorough cleansing cannot be carried out without some pain and inconvenient struggling, Mr. Hulke directs for "the safety of the child's eyes, and in order to lessen the chance of the accidental inoculation of the nurse's eyes, to have the child completely under control. For this it is neither necessary nor proper to give chloroform. A simple and efficient way is to place the child with its arms straight by its sides upon a shawl or on a long towel, and then swathe it round a few times in this, leaving only its head out. So swathed it cannot move, and one person, unassisted, can do all that is required to the eyes. The eyelids being now gently separated without pressing on the eyeball, the discharge should be wiped away, and the eyelashes cleansed with tepid water and small pieces of rag, which should be immediately burned. Next, if the nurse is intelligent, and has not clumsy hands, the conjunctival pouch under the upper and lower eyelid should be carefully syringed out with tepid water; for this a common pewter squirt will do. When the pus is thoroughly removed, some of the alum-water should be dropped into the eye, and diffused beneath the eyelids by moving them lightly over the cornea, or it may be injected under them with the squirt. After this, the eyelids are dried, and a little simple ointment is smeared along the edges in order to prevent the eyelashes becoming glued together. If the ointment is softened to the consistence of cream by warm-

ing it, it may be very neatly applied with a brush." Slightly smearing the edges of the lids with ointment, olive-oil, or cold-cream, by means of a camel's-hair pencil, is especially necessary before the infant goes to sleep. It is important never to bathe the inflamed eyes with *cold* water, but always with tepid water, or tepid milk-and-water. Warm fomentations and sponging are highly beneficial. The child should be kept in an airy, warm, but not too-brightly-lighted room, till the inflammation is cured.

Diet.—The nutrition of the infant is of great importance to furnish materials for averting the ulcerative process, or if that has already commenced, for supplying material for repairing the breach. Maternal breast-milk is essential. A weakly infant, attacked with severe ulceration of the cornea, and fed with artificial food, has hardly a chance of recovery. No lowering methods of treatment must be adopted, for they deprive the child of that reparative material which is so urgently required for averting or healing ulceration.

Preventive Measures.—The eyes of the infants of mothers who suffer from Leucorrhœa or Gonorrhœa should be carefully washed directly after birth, to prevent the development of the disease. The improvement of the mother's health prior to child-birth, including especially the arrest of the vaginal discharge, which we have stated to be the most common cause of the disease, is of great importance. Prevention must also have reference to the spread of the disease to others. Purulent Ophthalmia is *contagious*, and care should be taken to prevent the matter from the infant's eyes accidentally coming in contact with the eyes of other children, or even of adults. It also spreads by *infection*, and may be propagated through the air of a badly-ventilated apartment from one infant to another. It is important, therefore, that a suitable temperature should be combined with good ventilation ; but pure air must not be confounded with cold air or a draught.

110.—Gonorrhœal Ophthalmia (*Ophthalmia Gonorrhoïca*).

Definition.—An acute specific inflammation of the conjunctiva of the eyeball and lids, and characterised by a profuse discharge of yellow purulent matter, similar to that which issues from the urethra in Gonorrhœa.

This disease is the most violent, rapid, and destructive to which the eye is subject. Frequently, when the patient applies for relief the eye is already irreparably injured, and unless the course of the disease be promptly arrested the eye will be lost.

In this form of Ophthalmia, as also in the purulent or contagious variety, there is great danger that the conjunctiva should swell extremely and overlap the margin of the cornea, and lead to its sloughing, apparently by strangulation of the vessels by which it is nourished. When this condition occurs it is called *Chemosis*.

Cause.—The disease arises from the accidental contact of gonorrhœal matter with the eye, and not, as some have supposed, from a metastasis of the disease from the organs of generation to the eyes. In this way, the matter may be accidentally applied to the eye of a healthy person through the medium of clothes, towels, etc. Even children are sometimes thus contaminated. The disease presents similar symptoms to Purulent Ophthalmia, and to that affecting infants.

The disease is usually confined to one eye; if the other be diseased, it is because there has not been sufficient care to prevent inoculation.

Treatment.—*Acon.*, *Arg.-Nit.*, *Merc.*, *Hep.-S.*, *Bell.*, *Sulph.* Locally, *Merc.-Cor.*, ten drops to the ounce every two hours. This should be injected *under the lids* with a glass syringe. (See "Leading Indications for Ophthalmic Medicines" on following page.)

Accessory Means.—Assiduous bathing, fomentations, iced-water compresses, etc.; astringent *collyria*, and sometimes surgical measures. *Prevention*, see the preceding Section.

LEADING INDICATIONS FOR SOME OPHTHALMIC MEDICINES.

Belladonna.—Pain, redness, and swelling; *throbbing pains in the temples or eyes;* flushed cheeks, glistening eyes, and great *intolerance of light.* A dozen drops of the tincture may be mixed with half-a-dozen tablespoonfuls of water, and a spoonful given during the acute stage every hour, and afterwards every three to six hours. *Acon.* is often required in alternation with *Bell.* when there are general feverish symptoms; or two doses of *Acon.* may precede *Bell.*

Aconitum.—Ophthalmia, with *quick pulse,* dry skin, thirst, and when *arising from cold.* The early administration of this remedy, with the local use of cold compresses, will generally promptly relieve and cure Catarrhal Ophthalmia. For Gonorrhœal Ophthalmia Dr. Angel recommends it every hour, with the topical application of ice, or iced-water, during the first stage.

Mercurius Sol.—Ophthalmia marked at first by a copious discharge of watery fluid, which afterwards changes to *mucus and pus; agglutination* of the lids; smarting heat and pressure, with aggravation of the pains when moving or touching the eyes. There is considerable itching and irritation, but not much fever present.

Mercurius Cor.—In the most violent forms of acute Ophthalmia with extreme *dread of light,* or in *Chemosis,* the 1st or 2nd dec. dil. of this remedy will often cut short the attack.

Euphrasia.—Catarrhal Ophthalmia, with *profuse secretion of tears,* sensitiveness to light, stinging as from sand, and catarrhal Inflammation of the frontal sinuses and of the lining of the nose. In simple catarrhal Inflammation, *profuse lachrymation* being the chief symptom, it often cures without the aid of any other remedy.* In severe cases, it may be applied locally.

Argentum Nit.—This remedy is especially valuable in the *Purulent Ophthalmia of children,* which it cures rapidly and completely, without the local use of the nitrate. It is also valuable in Chronic Ophthalmia. Dr. Dudgeon highly recom-

* For the specific uses of *Common Eyebright,* with cases illustrating its value, see *H. World,* vol. iv. p. 30.

mends it as homœopathic to Gonorrhœal Ophthalmia ; two to four grains to an ounce of distilled water ; a small quantity of the solution to be introduced under the eyelids with a camel's-hair brush once a day, or every two, three, or four days, according to the symptoms.

Phytolacca Decandra.—Itching in the eyes, aggravated by gaslight; chronic Conjunctivitis, and rheumatic pains; reddish-blue swelling of the lids.

Arsenicum. — Obstinate Ophthalmia in *weak,* nervous patients, particularly if the secretion be *acrid,* with *burning ;* tearing or stinging pains in the globe and lids, aggravated by light ; paroxysms of pain ; violent stabbings in the eye ; eyeball feels like a globe of fire.

Phosphorus.—Chronic and *obstinate* cases which have resisted the usual remedies, with sensitiveness to light, heat and itching of the eyes, *sudden attacks of blindness,* black spots floating before the eyes, and secretion of viscid mucus.

Ac.-Nit.—Purulent Ophthalmia ; swelling and redness of the mucous membrane and lids ; secretion of viscid mucus or pus ; burning and smarting in the eyes ; Photophobia ; *nightly agglutination ;* and pains in the bones and parts around the eyes. *Ac.-Nit.* is required in cases originating in *Syphilis,* or aggravated by *mercurial preparations.*

Gelseminum.—Squinting ; *desire for light ;* orbital Neuralgia.

Pulsatilla Nuttalliana.—Eyelids agglutinated ; increased secretion of tears ; neuralgic pains in the eyeballs.

Hepar Sulph.—Similar cases to *Ac.-Nit.,* which it may follow, if necessary.

Arnica.—Inflammations affecting either the mucous membrane, or the deeper structures of the eye, from *mechanical injuries.* In addition to its administration, the eye should be bathed with a lotion of *Arnica* ϕ (twelve drops to four tablespoonfuls of water). After well bathing the eyes, a piece of lint or linen should be saturated with the lotion, applied to the eye, covered with oil-silk, and secured by a handkerchief.

Additional Remedies.—*Sulph., Silic., Puls., Lyc., Aur., Rhus, Spig., Calc.-C., Mez., Graph., Staph., Ac.-Benz.* (also locally as a paint), *Thuja, Morph., Coni., Ant.-Tart., Zinc., Kali-Bich., Am.-Mur.*

Accessory Measures.—In the treatment of the various forms of Ophthalmia, and weak and imperfect vision generally, the causes of the disease should be correctly ascertained, so that they may, as far as possible, be guarded against or removed. Patients in crowded and unhealthy towns should resort to the country, at least for a time, where they may take daily out-of-door exercise, and enjoy a pure, bracing air. Frequent careful tepid washing of the eyes to prevent accumulations of matter; the occupation of a spacious well-ventilated apartment; and avoidance of all causes likely to keep up the inflammatory process, are necessary precautions. The food should be plain and nourishing, coffee and fermented drinks being excluded; the habits early and regular, and frequent bathing should be practised. A small *wet compress*, covered with oil-silk or india-rubber, worn over the nape of the neck, is a valuable counter-irritant when the more violent inflammatory symptoms have been subdued; it is also useful in obstinate cases. See also "Accessory Measures," in Sections 108 and 109.

111.—Iritis (*Iritis*).

Definition.—Inflammation of the *iris*. [The *iris* is a movable curtain, having a circular aperture nearly in its centre, and occupies the space between the *cornea* and *crystalline lens*. Its use is to regulate the amount of light admitted into the eyes; for this purpose its inner circumference is capable of dilating and contracting, in obedience to certain influences, whilst its outer circumference is immovable. Suspended in the cavity which contains the aqueous humour, it divides it into an anterior and a posterior chamber.]

Causes.—Iritis may be *primary*, and may then be caused by (1) some constitutional cachexia, as Rheumatism, Syphilis, or Scrofula; (2) sudden exposure to cold or wet; or (3) mechanical and chemical injury. It may be *secondary*; and is then caused by the spread of inflammation from some of the surrounding tissues. The iris is seldom attacked alone; the inflammation usually involves other textures. The danger

of this disease lies especially in the tendency to closure of the pupil by adhesion of its edges to the surrounding parts.

Varieties.—*Traumatic Iritis* is due to some injury, as from a stab, cut, or blow. The iris is either contused, lacerated, or partially strangled. *Acute* traumatic Iritis commences within four or five days after the injury, with œdema of the lids and chemosis of the conjunctiva, and may terminate by recovery, by becoming chronic, or by destruction of the eye. *Chronic* traumatic Iritis commences within one to three weeks after the injury, is characterised by intolerance of light and flow of tears, by œdema of the lids, by change in the aqueous humour, by indistinctness in the striation of the iris, and by slow, dull pain in the eye; it may last for many weeks, and will yield to treatment very slowly. It has been called *Common* Iritis, because it is a case of *common Inflammation*, without any specific or constitutional taint. It generally occurs among artisans who are exposed to blows from pieces of stone, metal, etc., in the manufacture of which they are engaged.

Rheumatic Iritis is a serous inflammation associated with a rheumatic diathesis. It advances slowly and insidiously, and is occasioned by the same circumstances which excite rheumatic inflammation elsewhere. It is often associated with Catarrhal Ophthalmia, which involves the sclerotic. Relapse is common, so that a person may have an attack once or twice a year for the remainder of his life. There is no effusion of lymph, and nodules are never formed; even repeated attacks sometimes result in but little damage to sight. Dimness of sight, so that printed letters appear pale; fatigue of the eye after little use; Photophobia, and severe neuralgic pain, are the usual symptoms.

Arthritic Iritis occurs in persons of gouty habit when the system has been weakened by repeated attacks of the constitutional disease. It is painful, dangerous, and tedious. An attack may come on without acute inflammation, and may last for months and frequently recur, ultimately causing destruction of the organ. One eye is first attacked, and is diseased for some time before the other suffers. The special symptoms are varicosity and purplish colour of the vessels emerging from the recti muscles and covering the conjunctiva

and sclerotic, and the exudation of a white, thick, frothy matter, which clings to the eyelids, and causes frequent opening and shutting.

Syphilitic Iritis generally occurs about the middle period of secondary Syphilis, after the patient has suffered from sore throat, etc., but before the periosteum and bones become affected. It occurs in children during the first month of life, when there is danger of its being overlooked, and remaining an insidious and dangerous cause. It chiefly differs from the traumatic variety in the comparative absence of pain, except during the night, and as being a sub-acute or chronic disease. Its special symptom is the rapid exudation of lymph, forming nodules as large as millet-seeds.

Scrofulous Iritis exists as a secondary disease in strumous constitutions.

Gonorrhœal Iritis is similar to rheumatic, but is preceded by Gonorrhœa. It is characterised by serous exudation, and accompanied by excessive pain, photophobia, profuse flow of tears, and dusky redness of the sclerotic. It is one of the most severe forms of Iritis while it lasts, is very rapid in its progress, yields promptly to treatment, but is very likely to recur.

General Symptoms.—The *aqueous humour* becomes yellow and serous, and often turbid, with flocculi of lymph or pus; the *iris* changes colour, becomes dull, and loses its striated appearance in consequence of the effusion of lymph or fibrine; the *pupil* becomes sluggish in action, contracted and irregular in shape, the irregularity being caused by the adhesion of the pupillary margin to the capsule of the lens, at first here and there, then altogether, and, if the disease be neglected or mistreated, closed or obstructed. Around the *cornea* is a ring formed by a heightened vascularity of the ciliary vessels; the increase of vascularity impedes the motion of the iris. The *conjunctiva* is generally suffused, sometimes red and œdematous. There are also sclerotic and ciliary injection, extreme tenderness of the eyeball, and considerable impairment of vision, which increases as the disease advances. The circumorbital pain is in some cases slight, in others most acute; burning and neuralgic in character; sometimes limited to

the eye, sometimes extending over the brow and down the face, often coming on in paroxysms or aggravated at night; it is slight in syphilitic Iritis, most acute in rheumatic. Photophobia is generally present, though not excessive. Impairment of vision is frequently the only symptom for which a patient seeks advice; but in severe forms of Iritis pain and suppuration will impel him to place himself under medical care.

Epitome of Treatment.—

1. *Traumatic Iritis.*—Arn. both internally and externally; Acon. (*febrile symptoms*), Bell.

2. *Rheumatic.*—Acon., Spig., Euphr., Merc., Clem.; Sulph., K.-Bich. (*catarrho-rheumatic, in early stages*).

3. *Arthritic.*—Ars., Coloc., Spig., Cocc., Sulph.

4. *Syphilitic.*—Merc.-S., Cinnabar, Clem., Merc.-Iod., Bell., Aur.

5. *Scrofulous.*—See "Scrofulous Ophthalmia," Section 74.

6. *Gonorrhœal.*—Arg.-Nit., int. and ext.

See "Leading Indications for Ophthalmic Medicines," p. 445.

Accessory Means.—In all forms and at all stages of Iritis, cold compresses should be avoided, but warm applications, with due precaution against subsequent cold, are very beneficial. Dry warmth applied by warm wadding is preferable to warm poultices.

Whatever medicine may be given internally, *Atropia* will often be found necessary to prevent the adhesion of the iris to the capsule of the lens, and to avert permanent contraction of the pupil. Professor Von Graefe states that "the dangers of Iritis in general have materially diminished since the introduction of a bold use of mydriatic remedies in the acute form"; and *Atropia* is generally employed by oculists for the purpose of mechanically dilating the pupil. Little gelatine scales containing a minute proportion of the drug have been employed with considerable success. *Belladonna* is specifically applicable to inflammation of the tissues of the eye.

112.—Amaurosis (*Amaurosis*)—Gutta Serena.

Definition.—Impaired or lost vision, occasioned by primary disease or changes in the brain, the spinal cord, or the optic nerve.

The word *Amaurosis*, from the Greek, means obscure or dark, and may be of various degrees, from the slightest defect of vision to complete blindness. In this section, we restrict the term to degenerative changes in the cerebral or cerebro-spinal tissues. This form of Amaurosis is sometimes incurable, and the patient is liable to die of disease of the brain.

"The transparent parts of the eye, the several media, so skilfully and exquisitely adjusted for the due refraction and collection of the rays of light into an image of the object from which they flow, may all be perfect and in order; but the beautiful apparatus is useless, for the patient cannot see with it. The fault is in the *nervous* matter, that should receive and transmit the impression, and render it an object of perception to the mind" (*Watson*).

The Ophthalmoscope.—The diagnosis of Amaurosis is greatly aided by the use of the *ophthalmoscope*, which, from the light it throws on the nervous and vascular conditions of the posterior portions of the eye—aptly termed the outposts of the central nervous system—gives a faithful picture of the condition of the brain itself. Besides Amaurosis, many other diseases—Meningitis, Encephalitis, Hydrocephalus, Cerebral Hæmorrhage, Epilepsy, Locomotor Ataxy, Myelitis, nervous fevers, etc.—are accompanied by changes in the optic nerve and retina, which can be recognised by the ophthalmoscope. We recommend, therefore, a more frequent use of this instrument; as by means of the stethoscope we can learn the condition of the intra-thoracic organs, or by inspection of the tongue ascertain the nature of gastric disorders, so in like manner by means of the ophthalmoscope important information may be gathered respecting diseases of the brain and nervous system. As pointed out in the Section on "Old Age and Senile Decay," the ophthalmoscope is particularly valuable in detecting many of the degenerative changes of old age.

Causes.—The cause is sometimes obscure. It may be originated by *disease of the cerebrum* or *cerebellum*, such as tumours, hæmorrhage, softening, Hydrocephalus, Meningitis, Periostitis, or syphilitic deposits. Fractured bone may cause progressive atrophy of the optic nerve through pressure, or otherwise interfere with its nourishment. An embolus lodged in the retinal artery, detachment of the retina, or extravasations of blood on that membrane, will also cause Amaurosis. When the imperfect vision occurs suddenly, it is probably due to embolus. Amaurosis may be due to *disease of the spinal cord*. Where the blindness of *one eye* occurs, it is *not* due to cerebral disease. It is associated with Paraplegia, Locomotor Ataxy, etc., and is usually confined to *one eye*. When thus caused, the pupil of the affected eye is frequently contracted. The disease may arise from *uterine derangements*, such as sudden Amenorrhœa, irregular or scanty menstruation, ovarian or uterine disease, and pregnancy. It may also be caused by *loss of blood* or other exhausting discharge, as diarrhœa, or even vomiting. The absorption of lead into the system has been known to produce atrophy of the optic nerve. The excessive indulgence in alcohol, tobacco smoking, and other degenerative habits may also be causes. In elderly persons, Amaurosis is a symptom of senile decay, and generally comes on gradually. *Reflex* Amaurosis is due to remote causes, such as the irritation of teething, intestinal worms, injury or disease involving the fifth nerve, etc.

Symptoms.—These are very various and inconstant. In some cases there is merely the gradually increasing indistinctness of vision, without pain in eye or head, and without constitutional disturbance. In other cases, the pain in the head is acute for several days, then diminishes or ceases, and, as the pain passes away, the blindness gradually steals on until it is complete. In other cases, intense headache, always present though sometimes abated, precedes and accompanies the loss of sight. In Amaurosis from cerebral disease, the *pupil* is at first dilated and sluggish; it is subsequently expanded and immovable, giving to the eyes the well-known peculiar vacant stare. In Amaurosis from disease of the

nation there be atrophy of the optic nerve (white atrophy), when the disc looks large, flat, bluish or pearly-white, there is little hope even of retaining any remaining sight. When the disease is advancing, the patient sees best in a bright light, and objects usually appear perverted, being only partially seen, or of an unnatural colour, or double; or dark bands, floating dark spots (*muscæ volitantes*), or flashes of light cross the field of vision. If there be complete loss of vision, the pupil is insensible to light, but beautifully black and clear; hence the disease has been called *Gutta serena.*

Amaurosis is not peculiar to any age, and may come on either rapidly or gradually.

Treatment. — The treatment by medicines must vary according to the nature and primary disease of the different cases. The cause of the defective sight must be ascertained by enquiry into the history of the case, by examination of the eye, and by attention to the accompanying symptoms. The prospect of benefit will be greater or less, according as the degenerative changes in the optic nerve are progressive or stationary. The most hopeful cases are those which are acute and dependent on the sudden arrest of the function of some internal organ, or on syphilitic taint, which are so recent that organic changes have not had time to take place.

Epitome of Treatment.—

(1.) *Nerve Irritation or Atrophy.* — Merc.-Cor. (*organic change, Struma, Syphilis*); Phos. (*debility* or *old age*); Ac.-Phos. (*self-abuse*); Sant. (*hyperæsthesia*); Bell. (*congestion*).

(2.) *Atony.*—China (*loss of blood or other fluid*); Nux V. (*excessive mental labour*); Gels. (*thirst for light, Diplopia,* post-diphtheretic); Bell. (*shrinking from light*); Ruta, Arn. (*over-straining of the eyes*); Euphr. (*Lachrymation*); Lithium (*hemiopia*); Ars., Quin., Zinc., Phos., K.-Hyd., Aur.

(3.) *Other Remedies.*—Spig., Croc., Macrot., Strych.

Professor Nagel, of Tübingen, and other *oculists*, have successfully used hypodermic injections of *Strychnia*, one-fortieth of a grain dissolved in water and injected under the skin of the arm.

Leading Indications.—

aching in the eyes after reading, sewing, etc., *dimness* of sight, and *haziness* of the letters on reading; gr. j. (lx) of this remedy, every night at bed-time, has a remarkable effect; it may be given alone, or if, on examination with the ophthalmoscope, congestion of the optic disc is found to exist, *Bell.* may be given twice or thrice daily.

Belladonna.—Excessive *Photophobia;* redness of the eyes and face; threatened Amaurosis, with *Headache,* bright flashes before the eyes, and a sense of weight and pressure in those organs. It is particularly suited to stout, plethoric persons; also if the disease has been caused by Inflammation or Congestion of the optic nerve, retina, or some part of the brain.

Phosphorus.—The pupils and eyes are of a natural appearance, but distant objects are seen as if enveloped in mist; black spots before the eyes, and diminished vision. It is especially indicated when imperfect vision occurs in *aged* or *enfeebled persons;* or when *self-abuse,* etc., have led to it.

Ac.-Phos.—Useful in the condition last mentioned.

Nux Vomica.—Intermittent obscurity of vision; or temporary loss of sight which occasionally accompanies intermittent diseases; *stupefying Headache.* This remedy is further indicated in Amblyopia traceable to *close confinement within doors,* excessive *mental labour,* Indigestion, or indulgence in *stimulants.*

China.—Indistinct vision, sudden obscuration of sight, general debility, and when the disease is due to *profuse discharges* of blood or pus, or prolonged nursing. *China* may require the aid of *Bell.* or some other remedy.

Merc.-Cor.—Contraction of the pupil, mistiness of sight, dread of light, *muscæ volitantes,* sensitiveness of the eyes to the glare of the fire, etc. This remedy is especially indicated when imperfect vision arises from *organic changes* in the tissues of the eye; also when there is a scrofulous or *syphilitic* taint.

Gelseminum.—A prominent indication for the use of this remedy is—*desire for light,* thus contrasting with *Bell.;* Diplopia, confusion of sight, pain in the orbits. Affections of the sight from over-exertion of the eyes are much

relieved by *Gels.*, as are also those arising from over-doses of *Quinine.*

Aconite.—Rheumatic Amaurosis, and that resulting from compression of the optic nerve by over-distention of the internal carotid artery.

Euphrasia.—Excessive *Lachrymation;* also when the complaint is traceable to Catarrh.

Arnica.—Aching of the eyeballs when reading; Amblyopia from *external injuries;* and from gastric irritation, with contraction of the pupil.

Hep.-Sulph. (*patient sees badly by candle-light; sight becomes dim when reading; photophobia*); Plumb.-Acet. (*with paralytic conditions*).—*J. H. Clarke.*

Accessory Treatment.—Attention must be directed to the maintenance of the general health, and to the removal of remote causes. Freedom from excitement, protection from light, and absolute rest for the eyes, are necessary. Warm, cold, or Turkish baths may be required. Electricity may be useful in cases of atony.

Suggestions on the Preservation of the Sight.—In addition to the measures already pointed out, the following remarks on conditions favourable and unfavourable for the exercise of the eyes may be found useful.

1. *Conditions of light favourable to the eyes.*—Daylight, owing to its mildness, uniformity, and steadiness, furnishes the kind and degree of illumination best suited to the function of vision. With all our scientific improvements, artificial light is but an imperfect substitute for the clear light of day; being often too powerful or too feeble, flickering or wavering, and at the same time injuriously heating and deteriorating the air by the combustion of its oxygen. To enjoy daylight to its fullest extent, involves an observance of the excellent and healthy habit of *early rising;* which, therefore, on this account, as well as on other considerations, we strongly recommend. Morning light is also specially adapted to persons having a tendency to weakness of vision, as the light is then *increasing.*

If it be necessary that work should be done by artificial light, that kind should be selected which requires least

exertion, as writing rather than reading for the student, and lighter and coarser work instead of fine and dark-coloured material for the seamstress.

2. *Unfavourable condition for exerting the eyes.*—The eyes should not be exercised directly after a full meal; when the body is fatigued; late at night, when sleepy; when in a recumbent or stooping posture; when travelling; when dressed in tight clothing—tight cravats, stays, or even tight garters or boots; in badly-ventilated rooms lighted by gas; during recovery from severe or exhausting disease.

Light must not be too strong, or it is apt to dazzle the eyes, cause a rush of blood to the head, and excite a discharge of tears; on the other hand, a weak light is equally injurious; and if the eyes are used when the light is declining, so that it becomes necessary to hold the book or work nearer in order to see, the sight must inevitably suffer. An unsteady light, as from imperfect gas burners; or using the eyes when the waves of light are in motion, as under a tree, or when driving, is highly detrimental, for the eyes are severely exercised in continually readjusting themselves. These are some of the conditions in which, if reading or other close exercise of the eyes be persisted in, the sight will suffer, and Amblyopia or Amaurosis possibly ensue. The danger to the sight is especially great during *convalescence* from prolonged exhausting disease, when patients are apt to read a great deal; to the weakness of vision is then often added that of a bad posture, such as the recumbent, or even artificial light, rendering such a use of the eyes extremely prejudicial.

Convalescents should listen to reading, and the matter should be interesting and amusing, without requiring close application of the mind.

It should be remembered that the reading of a novel is more hurtful to the sight than that of a scientific book, because it is read faster, and the eyes are more severely exercised. A broad page is also obviously more fatiguing to the eyes than a narrow one. On the eyes becoming dim after too long exertion they should *rest*, and on no account should an attempt be made to persist in reading by increasing the light.

Eye-shade.—An eye-shade or eye-protector, of brown or slate-coloured paper, covered with green or grey silk, and secured by a tape or piece of elastic, answers the purpose well for protecting the eyes from gas, etc., indoors. For protection from the rays of the sun out-of-doors, a wide-brimmed hat answers admirably. An eye-shade should be worn when there is unnatural sensibility to light.

Spectacles.—Spectacles of plain blue glass are useful for morbid sensibility of the eyes to light, and may be darker or lighter in shade, according to the amount of protection required; or brown or smoke-coloured glasses may be used if preferred. The latter cut off the rays of light, and consequently render vision somewhat less distinct, while blue glasses, excluding the orange rays only, interfere less with the clear definition of objects. Green glasses protect the eyes from the red rays; but it is the orange rays which are most intolerable to a sensitive retina. Strong plate-glass spectacles should be worn by persons finding it necessary to protect the eyes against chips and particles of stone or steel.

In all measures adopted for the general protection of the eye, good ventilation and a healthy temperature must not be forgotten.

Eye-douche. — Much benefit often results from a cold douche-bath, a stream of water being directed on the closed eye and adjacent parts. Surgical-instrument makers sell instruments specially adapted for this purpose. In the absence of one of these, water may be thrown by the hand against the closed eyes when holding the face over a basin.

Eye-Compress.—In cases where it is necessary to apply a pad to a wounded, inflamed or diseased eye, Professor Von Graefe recommends the following bandage: "The bandage should be about $1\frac{3}{4}$ yards in length, and $1\frac{1}{2}$ inches in width; the two outer thirds should consist of fine and very elastic flannel, the central third of knitted cotton. [A linen bandage may be substituted if it is not convenient to provide the other.] The eye having been padded, the bandage is to be adjusted in the following manner:—One end is to be applied to the forehead just above the affected eye, and is then to be

passed to the opposite side of the forehead, above the ear, to the back of the head; the knitted portion is then to be carried on below the ear, and brought upwards over the compress, the bandage being passed across the forehead, and its end firmly pinned. The opposite eye may be closed with strapping plaster, or, if it also require a compress, a separate bandage is to be applied to it." Liebreich's Eye Bandage is useful because it is so constructed as to be fitted to the head.

113.—Amblyopia (*Amblyopia*)—Impairment of Vision.

Definition.—Impairment of vision due to irregularities in the nervous or circulatory system, or any cause other than anomalies of refractive power, as when no glasses improve the vision. The impairment may lead to degenerative atrophy of the optic nerve, and thus cause Amaurosis.

Diagnosis.—A simple and reliable method of distinguishing Amblyopia, and other affections involving loss of vision, from anomalies of refraction which only require proper glasses for their cure, is by requesting the patient to look through a large pin-hole in a black card. *If vision is not improved*, the defect must be referred to some of the inner structures of the eye, and an ophthalmic examination must be made to detect its nature. *If vision is improved*, the refractive power is at fault, and will be corrected by suitable glasses.

Causes.—Excessive use of the eyes on too bright or too minute objects; too much sleep; the use of tobacco or stimulants; suppressed exhalations from the skin from exposure to cold and wet; suppressed period; etc. These and similar causes may lead to temporary Congestion of the brain, and over-stimulate and exhaust the retina, causing dimness or entire suspension of vision, without permanently damaging the nervous structure of the eye. On the other hand, an anæmic condition of the system may diminish the supply of healthy blood to the brain and retina, and produce Amblyopia by exhaustion. Excessive drains on the system, as from flooding in child-bed or at the monthly period, prolonged nursing, sexual excesses, or severe illness. A similar condition may be induced by chronic Dyspepsia from functional or

organic disease of the stomach or liver. These affections may cause impairment of vision, through the medium of the sympathetic system, by diminishing the nervous and vascular supplies required for the healthy functions of the eye. Dental causes may be in operation, rendering the extraction of a tooth necessary.

Epitome of Treatment.—

1. *From Congestion.*—Bell. or Macrot. (*Congestion of the nervous tunic of the eye*); Puls. (*suppressed period*); Glon. or Cact. (*complication of heart troubles*); Sang. (*severe throbbing Headache*); Phos. (*Congestion to the head; Epistaxis*); Bry. (*with Rheumatism*); Cact. (*hyperæmia of the retina*).

The Turkish bath, judiciously taken, is often of great service and has been found to diminish Congestion of the brain, as proved by ophthalmoscopic examination made before and after the bath. All habits likely to produce Congestion should be avoided. See under "Causes."

2. *From blood impoverishment.* — Ferr., Ac.-Phos., Ars., Chin., Euphr., Helon. At the same time, Hæmorrhage or other drains on the system must be arrested before improvement can be expected; even after the cause is removed, correctly chosen remedies must be aided by a nourishing diet, sufficient rest and sleep, the pure air of the country or the coast, tepid or cold bathing, and other favourable conditions.

3. *From Dyspepsia*, etc.—Nux V., Merc., Puls., Chin., Bell., etc. For Indications, see the Section on "Dyspepsia."

4. *From over-use.*—Ruta., Arn., Sant.

Dr. J. C. Burnett recommends *Aurum* in hemiopia or half-sight—that is, when the upper half of the field of vision is covered by a dark body.

For "Leading Indications," see the preceding Section.

114.—Muscæ Volitantes (*Muscæ Volitantes*)—Spots before the Eyes.

Definition.—An appearance before the vision as of black motes; or of thin grey films, like the wings of a fly; or half-transparent grey threads, like spiders' webs; or if viewed

against a white wall, or other clear and near object, they appear as one or a number of small circles with a central aperture.

They are probably the *débris* of cells, or corpuscles of the vitreous humour, or granules and fibres, floating in the vitreous in and out of the field of vision.

Causes.—The exciting causes of these ocular spectres are chiefly the following: excessive use of the eyes, especially in artificial light, or in badly-ventilated rooms; insufficient sleep; certain fevers, as Typhus and Enteric; deranged digestion; *Hypochondriasis;* morbid sensibility of the general system from business or family cares, or mental distress. A hypochondriacal person having once detected muscæ, takes such frequent notice of them that they become a subject of great anxiety.

Muscæ Volitantes may, however, arise from organic causes, and are frequent precursors of Amaurosis or of Cataract. They are more serious, as indicating organic changes in the organs of vision, when associated with real impairment of vision, and when the motes are not *floating*, but *fixed*. The latter are generally associated with Amaurosis (see Section 112). When they are floating, and not attended with impairment of vision, there is no need for alarm, as their existence is compatible with good sight.

Treatment.—*Hyos., Bell., Coni., Cocc., Merc.-Cor., K.-Hyd., K.-Carb.*

"*China* (from general weakness, after illness or exhausting discharges); *Nit.-Ac.* (from liver disorder); *Phos.-Ac.* (from sexual excess); *Nux Vom.* (from alcoholic excess)."—*J. H. Clarke.*

Accessory Means.—If the eyes have been overstrained, *rest* is essential; there should also be entire or partial relief from ordinary daily duties; a regulated, nourishing diet; daily moderate out-of-door exercise in country- or sea-air; and bathing of the eyes, closed, with cold water, for two or three minutes several times daily. The muscæ should not be looked for. If they are very troublesome, glasses of neutral tint or dark cobalt-blue should be worn to render them less apparent.

115.—Cataract (*Suffusio*).

Definition.—Opacity of the crystalline lens (*lenticular*), or its capsule (*capsular*), or both (*capsulo lenticular*), causing obscuration or total loss of vision. Opacity of capsule always leads to opacity of lens.

Varieties.—There are two classes of Cataracts, the *soft* and the *hard*. The *soft* (*suffusio mollis*), or lenticular Cataract of young people, may occur at any time from infancy to thirty or thirty-five years of age; its consistence being chiefly determined by the age. It is characterised by a light, bluish tint, and extended circle. The *hard* (*suffusio dura*) or lenticular Cataract of old people, is the most common form, and may come at any age after thirty-five. It is of a grey or yellowish-grey colour.

Another classification has reference to the cause of the disorder. There is *congenital* Cataract, dating from birth; *traumatic*, occasioned by injury; *secondary*, consequent on disease of the vitreous, choroid, or retina; *diabetic*, dependent on Diabetes; *senile*, occurring from old age; or it may be occasioned by some constitutional disease which interferes with the general nutrition of the body and therefore of the eye.

Causes and Objective Symptoms.—*Defective nutrition* of the lens; constitutional disease; changes in the deeper structures of the eye.

Congenital or *Infantile Cataract* is, as the term implies, dependent on faulty conformation, or is associated with infantile convulsions. Hereditary predisposition exerts an important influence, Cataract not unfrequently being found to occur in several children of the same family, evidently pointing to some peculiarity in the constitution of the parents. Children whose parents are first cousins often suffer from Cataract and other congenital defects. In this form of Cataract, the eyes are usually small, and frequently associated with stunted bodily growth and feeble mind. A slight and partial dimness may exist for years without change, but generally the entire lens will ultimately become opaque.

Traumatic Cataract arises from an injury, or from

mechanical or chemical irritants: exercise of the eyes in the hot sun, or before too hot and bright fires; long-continued use of the eyes on too minute objects, etc. If there be rupture of the external coats of the eye, injury to the lens is almost certain. If it be wounded, the aqueous humour is admitted within the capsule, is imbibed, and diffused, causing swelling and opacity of the lens. Great irritation of the iris is caused by the swelling, especially in adults; and other conditions arise which make the state of the eye dangerous and call for immediate treatment. If the lens be wounded, Cataract almost invariably ensues. Sometimes the lens is injured without any rupture of the external coats. A blow may cause a rent in the capsule, or may disturb the internal structure of the lens so that nutrition may be impaired, and transparency destroyed.

Secondary Cataract, consequent on disease of the vitreous, choroid, or retina, is not only characterised by opacity of the lens, but also by degeneration, due to the deposition of earthy salts. The lens has a peculiar appearance—shrunken, flattened, chalky white or slightly yellow. This condition is hopeless.

Diabetic Cataract is usually soft, because the primary disease generally attacks those who have not passed middle life. "It comes on generally after the diabetic state has lasted eighteen months or two years; but it has been known to appear in six months. Its course is rapid; the two eyes may become completely cataractous in a few days; sometimes it is developed more slowly" (*Roberts*). It is very similar in character to that of senile decay, and is no doubt due to the imperfect nutrition of the whole constitution.

Senile Cataract is due to the lessened activity of the nutritive functions consequent on the decay of age. It varies in consistence, but is always characterised by a distinct, firm nucleus,—sometimes small, hard, and surrounded by soft cortical matter,—sometimes large, hard, amber-coloured, and without cortical matter,—and sometimes small and surrounded by a fluid, opaque cortex. In some cases, the formation of the cataract is rapid, in others, slow; in some, one eye is affected, in others, both. If both are closed, and

an operation is to be performed, it should never be on both eyes at once. The result of one operation should be ascertained before another is attempted.

Fluid Cataract (*suffusio liquida*) is rare, occurs in children, is sometimes congenital, has a greyish-white, milk-and-water appearance without streaks or spots, and may be recognised by being seen to move with different positions of the head. There is a form met with in elderly people, due to degeneration of the lenticular matter, which is converted into a semi-transparent fluid containing oil globules.

Besides the causes thus enumerated, Cataract is known to be a result of ergotism. It has also been produced in frogs by administering sugar in large quantities, or by injecting it under the skin. Chloride of sodium and alcohol have produced the disorder.

Subjective Symptoms.—The opacity comes on in a gradual manner, first affecting one eye, but afterwards both, and is often discovered by accident only. Objects appear to the patient as if seen through a mist or gauze, and a flame is observed surrounded by a halo. Vision is less affected in a weak light, such as twilight, or when the patient has his back to the window; for, under such circumstances, the pupil dilates widely, and the light enters at the circumference of the lens, which is less opaque than the centre. For the same reason, *Atropine* improves vision. The patient also sees better in an oblique than in a straight direction, because the lens, being shrunk, does not completely cover the vitreous humour. From the gradual way in which the disease comes on, the patient retains a natural, easy manner, very different from the fixed, vacant stare which marks complete *Amaurosis*. Indeed, the patient never becomes so blind but that he can distinguish day from night, the position of the window, the shadow of passing objects, and is able to find his way about his own house with little difficulty. Pain, dread of light, spectra, etc., indicate unfavourable complications.

Epitome of Treatment.—Bell. (*after inflammation of eyes*); Cann. (*specks on the cornea*); Calc. (*in strumous persons*); Sulph. (*after cutaneous eruptions*); Puls. (*from suppression of*

menses); Merc., Sil., Coni., Euphr., Phos., etc. Cures, or beneficial effects, have often resulted from the above remedies.

In addition to the above, *Dr. J. C. Burnett* recommends—Lyc., Sil., Mag.-Met., Caustic., Bary.-Carb., Amm.-Carb., Sep., Chel., Iod., Dig., Spig., Colch., Secale, and Opium.

Operations. — Sometimes Cataracts are amenable to medical treatment, but they generally require surgical measures. Any operation, however, should be deferred so long as the patient has useful vision with one eye, lest an operation should produce Inflammation, which might extend to the other, and thus both eyes be lost.

Medical Treatment.—It does not seem improbable that, in the course of time, we may find some reliable remedy, the administration of which, before the lens-fibre has become degenerated, may restore its transparency.

116.—Glaucoma (*Glaucoma*).

Definition.—Excessive serous infiltration of the eyeball, causing intra-ocular pressure, characterised by increased hardness and tension of the globe, impairment of the field of vision, and fading sight, and terminating (if not interrupted by treatment) in total blindness. The quantity of *vitreous humour* is increased, and changes take place in the contents of the vitreous chamber, which cause derangements in the circulation, nutrition, and functions of the different tissues of the eyeball.

Causes.—Glaucoma generally affects pale, unhealthy persons, beyond middle age, in whom degenerative processes have begun. It may be idiopathic, or may be secondary to inflammation, or may be due to some injury (*traumatic glaucoma*), or some sudden mental shock, from grief, loss, or fright. It is most frequent in women, and often follows physical or mental depression occasioned by fatigue in watching the sick, or grief in mourning for loss of friends.

Premonitory Symptoms.—*Rapidly increasing failure of vision*, the patient frequently requiring stronger glasses;

intermittent dimness of sight, objects appearing as if enveloped in smoke in the afterpart of the day; with or without slight redness and watering of the eyes; *halos* of various colours around the candle or gaslight; contraction of the field of vision; *increasing hardness of the globe;* dulness of the cornea, as of a glass that has been breathed upon; and Neuralgia of the ophthalmic division of the fifth nerve. One eye is usually first affected, but the other is liable to be simultaneously or subsequently attacked.

Subsequent Symptoms.—In *acute inflammatory* cases, the eye exhibits signs of internal congestion, the vessels are distended, the anterior chamber is diminished, the pupil is dilated and sluggish. The sight gets rapidly worse. The pain consequent on increased tension of the globe is most acute, even maddening, and is sometimes mistaken for Neuralgia. The aching around the orbit, at the side and back of the head, is intense. Sometimes there is sympathetic vomiting, leading the sufferer to mistake the real disorder for a bilious attack.

If the acute symptoms subside, and sight be partially regained, it remains impaired, and there is liability to recurrence of the disorder. If they do not subside, or if several attacks supervene, *glaucoma absolutum* ensues, the globe acquires stony hardness, the iris is thinned, the pupil is fully enlarged, the lens is pushed forward to the cornea and becomes sea-green, and degenerative changes take place which occasion great pain, so constant or so frequent as to banish sleep and impair health. In *simple* or *chronic* cases, there is little or no pain, but the disease makes steady though not rapid progress. An acute attack may, however, occur at any time.

Ophthalmoscopic Symptoms.—The most characteristic is the *cupping of the optic nerve*, or glaucomatous excavation caused by extreme pressure within the globe. The whole optic disc is involved, and is encircled by a light-coloured zone. The margin is abrupt, overlapping the cup, and the vessels curling over its edge appear to be interrupted or bent. The centre of the papilla is of a bluish-grey tint. The vitreous humour is sometimes so turbid that the "cupping"

cannot be observed. The retinal arteries pulsate either spontaneously or by slight pressure, and the veins are dilated and tortuous.

Epitome of Treatment.—Kali Hyd., Ars., Ipec., Phos. (*congestion and inflammation of the choroid*); Merc. (*hepatic or syphilitic complication*); Nux V., Ham., or Collin. (*co-existing Hæmorrhoids*); Spig., Bry., Colch. (*rheumatic or arthritic symptoms*); Cimic., Bell., Spig., Merc., Cham. (*ciliary Neuralgia*); Santonine (*idiopathic Glaucoma*).

Accessory Means.—Rest is of prime importance. Hot-water fomentations, medicated with *Bell.*, or *Opi.*, are often useful to mitigate pain. We can only be sure that the treatment is proving of real service when we find that it *reduces the hardness of the globe.* Whatever reduces the tension of the eyeball in Glaucoma acts curatively. It is probably the intra-ocular pressure that, long continued, produces blindness.

In *Traumatic Glaucoma*, indicated by increased pain, hardness of the globe, lessening of the anterior chamber, and pink tinge of the sclerotic, the lens should be immediately removed. This may be accomplished by suction.

Iridectomy, an excision of a portion of the iris, before the morbid changes have existed long enough to destroy the visual power by their fatal pressure, is the *best* means of cure. It immediately relieves the tension and the consequent distressing symptoms and unhealthy action. It affords the best chance for the eye, if it be *promptly performed.* But in acute cases, every hour lessens the chance of recovery; for too long pressure of the delicate tissue of the retina destroys its powers beyond recovery.

117.—Strabismus (*Strabismus*)—Squinting.

Definition.—A condition in which the axis of one eye is not parallel with that of the other; there is loss of *harmonious* movement of the eyes, and if the unaffected eye be closed, the squinting one looks straight.

Varieties.—If the squint is directed towards the mesial line, it is called *convergent;* if outwards, *divergent;* if confined to one eye, *monocular;* if the squint alternate between

the two eyes, *binocular*. There is also a practical division into the periodic and the confirmed, although the pathology of the two is identical, and the former is but the precursor of the latter.

The inward or convergent is the most common, and this is usually dependent on hypermetropia. In this case, the disorder first appears when the child first applies the eyes to close work in reading and sewing,—when the efforts are first made to accommodate the eyes to near objects. To accomplish the object, the internal recti muscles acquire increased strength, overcome the opposing strength of the external recti, and thus establish the convergent Strabismus.

Causes.—These are occasionally obscure. Sometimes it arises from an unequal use of the eyes, as from imitating others who squint, looking at spots on the nose or face, or forming the habit of turning the eye inward; sometimes as a consequence of Scarlatina or Measles; from irritation, as of worms, teething, indigestible food; from passion; from disease of the brain (see Sec. 73); and from general ill-health. When it occurs in the course of any disease of the brain, it must be regarded as an unfavourable symptom. Sometimes it is congenital. In aged persons, the condition is due to partial Paralysis of the *rectus internus*—the inner muscle of the eye.

Epitome of Treatment.—

1. *Squinting from cerebral irritation.*—Bell., Stram., Hyos., Sulph., Gels. These remedies are adapted to cases following the eruptive fevers, during Dentition, etc.

2. *From the irritation of Worms.*—Cin., Spig., Sulph.

3. *From causes not traceable.*—Spig., Phos.

"Lyc. (*convergent*); Alumina (*squint of either eye, loss of power of internal rectus*); Alumen (*internal squint with right eye*)."—*J. H. Clarke.*

Corrective Treatment.—The careless or irregular use of the eye should be guarded against. An attempt may also be made to correct the deformity by closing the unaffected eye for a little while several times a day, and causing the other to look in the direction of the weakened or paralysed muscle and opposite the squint. This, however, must be done in-

telligently, or while curing the one, the affection may be set up in the other. In recent cases, from Dentition, Worms, Whooping-cough, gastric or other disturbances, the removal of the primary disease is often sufficient to restore the normal position of the eyes. Congenital Strabismus can only be cured by surgical operation.

118.—*Myopia (*Visus brevior*)—Near-sightedness.

Myopia, or *Short Sight*, is generally connected with too great length in the antero-posterior diameter of the globe of the eye, causing the convergent rays of light to meet in a focus before they reach the retina, and thus occasioning indistinctness of vision. It is sometimes due to a too great refractive power in the eye. When the distance at which ordinary type can be easily read is less than twelve inches, the vision is said to be myopic.

Causes.—The optical defect of the myopic eye is sometimes congenital, often hereditary, but still oftener acquired. In any case, it must be regarded as a diseased condition, and inflammation of the fundus of the globe may generally be detected by the ophthalmoscope. The degree of Myopia is often augmented by over-exertion of the eyes, and by increased amount of disease. Occasionally, indeed, Myopia diminishes with senile changes, but, as a rule, short-sighted eyes get rather worse in advanced life.

It is conclusively established that long-continued use of the eyes at near objects, the application of the eyes in early childhood, perhaps by insufficient light and at faulty distances or angles of the desks or tables, produce or increase Myopia. Short-sightedness is far more common among the educated—poets, artists, critics, etc.—than among the illiterate, proving that over-use of the eyes leads to the affection. At one of the colleges of Oxford, 32 out of 127 students were myopic. In Germany, the disease is very common. Dr. H. Cohn found

* Dr. Wecker believes the great prevalence of Myopia in Germany to be due partly to wearing too strong glasses. But Dr. Angell thinks it is due principally to the peculiar text in which their books are mostly printed.

that of 132 compositors, 51·5 per cent. were myopic; that 68 per cent. of the students of the University of Breslau were near-sighted, and that of these 68 myopes, so large a number as 51 had in earlier life possessed unimpaired distal vision. He states that in consequence of the rooms not being well lighted the students have to stoop over their books. This causes a strain upon the muscles, and an elongation of the axis of the eye, with an increase of hydrostatic pressure on the posterior portion of the eyeball and congestion of the latter. A prolonged tension results in permanent elongation of the axis. Dr. Cohn's investigations also show that the percentage of myopes increases from the elementary school upwards, according to the increased demand for study. For example, in five village schools the Myopia was about $\frac{1}{24}$: that is, the concave glasses required to render vision acute for distance were on the average of about 24-inch focus.

In 22 Elementary Schools the Myopia averaged about			$\frac{1}{}$
In 2 Gymnasiums	,,	,,	$\frac{1}{18}$
In 2 Prima (highest school)	,,	,,	$\frac{1}{17}$
In the University (Breslau)	,,	,,	$\frac{1}{14}$

These statistics show plainly the progressive nature of the disease, while another fact is also made clear, namely, that the affection is but infrequently due to hereditary causes.

City or town residence, again, by the constant self-adaptation of the eyes to short distances, is a powerful predisposing cause. It cannot but make a vast difference in the conditions of the interior of the eye in the course of years, much more in successive generations, whether it is daily employed in looking at walls a few feet distant, or, as in the country, at mountains and forests which often are in view miles distant. In the old cities of Europe, that have been occupied, perhaps, for forty or fifty generations, the majority of the inhabitants are near-sighted.

Treatment.—Irritability, tension, and heaviness in the eye, with pain around or in the eye, require *Spig.*, *Bell.*, or *Macrot.*, and if inflammatory symptoms are strongly pronounced, *Acon.* may be first given to allay them. If there is much venous congestion, *Ham.* is indicated; this remedy may also be used in the form of a *lotion* (20 drops to half a

tumbler of water). If the general health be much impaired, suitable remedies must be selected to meet the constitutional condition.

Accessory Means.—The eyes should be *rested* till Congestion or irritability is removed. Over-work, examination of minute objects, etc., should be avoided, especially by gas-light. The gentle use of the eye-douche, a weak collyrium, or a wash o simple tepid milk-and-water.

Spectacles.—In the majority of cases, no medical treatment is required, but only the choice of suitable glasses. These should not be purchased at random of opticians or vendors, but under the guidance of an oculist or physician who gives sufficient attention to the subject.

"After prescribing with the greatest care the proper glasses, it is necessary in progressive Myopia to enforce the *strictest hygienic measures*. Our patient should not work continuously at near objects, but should rest for a short time at intervals of a quarter or half hour, and always whenever the eyes feel the least fatigued. He should never work or read with the head bent forward, as this promotes intraocular Congestion, Choroiditis, and increase of *Staphyloma posticum*. The light should fall upon his work from behind, so that the eyes may be protected from glare. Children's school desks should, therefore, be made sufficiently high and sloping, and be placed, as regards light, to fulfil these conditions" (*Angell*).

119.—Inflammation of the Eyelids (*Inflammatio Palpebrarum*).

Symptoms.—Redness, soreness, and swelling along the margin of the eyelid, whence it spreads over the whole lid.

Treatment.—*Aconitum.*—Febrile symptoms, and when the affection has arisen from exposure to cold. *Belladonna.*—Bright redness of the part; dread of light. *Apis.*—Much swelling (*œdema*). *Rhus Tox.*—Erysipelatous appearance of the lids; formation of small vesicles. *Hepar Sulph.*—Neglected cases, with suppuration. *Conium.*—Chronic.

Accessory Treatment.—Bathing the eyelids with warm milk-and-water, or the early use of the cold compress. Exposure to cold draughts of air should be avoided.

120.—Hordeolum (*Hordeolus*)—Stye on the Eyelid.

Definition.—A small, painful Boil, with slight Inflammatory symptoms, projecting from the margin of the eyelids.

Cause.—Debility or Struma.

Treatment.—*Pulsatilla.*—This is the principal remedy, and should be the first administered, alone, or in alternation with *Acon.* If given very early, *Puls.* often disperses the Stye; one or two drops may also be applied locally.

Aconitum.—Inflammation, pain, and restlessness.

Sulphur or *Hep. S.*—A dose morning and night, for a few days, to prevent a recurrence of Styes. For this purpose *Staph.* is also useful.

Calcarea and *Sulphur.*—Are chiefly valuable in frequently recurring Styes, and especially in persons of a scrofulous constitution. They should be administered for a week each in succession, as follows:—*Calc.*, morning and night, for a week; then, after waiting two or three days, *Sulph.* in the same manner, repeating the course as often as necessary.

Auxiliary Treatment.—Fomentations with hot water, and if there is much Inflammation, a bread-and-water poultice, covered with oil-silk, applied over it at night. If the Stye is tedious in breaking, it may be opened with a lancet, or punctured with a needle, and the matter gently pressed out. If dependent on general debility, hygienic measures are necessary to restore the constitutional vigour. Cod-liver oil is often required.

121.—Entropium (*Entropion*)—Inversion of the Eyelid; and Ectropium (*Ectropion*)—Eversion of the Eyelid.

Definition.—*Entropium* is a growing inwards of the eyelid and lashes, so as to occasion great disfigurement, and constant irritation of the globe of the eye, often leading to Chronic Ophthalmia. It is generally caused by old Purulent or Granular Ophthalmia, and the employment of caustics, and chiefly occurs amongst the lowest ranks of society, especially the Irish.—*Ectropium* is an *eversion* of the eyelid. It may result from burns on the face, or from thickening of the conjunctiva from Tarsal Ophthalmia (see the next Section).

Treatment.—This is similar to that recommended for "Scrofulous Ophthalmia" (Section 74). *Phos.*, *Gels.*, *Coni.*, *Sulph.*, *Merc.*, or *Euph.* is generally required. Also cod-liver oil (see Section 29). Both conditions require surgical treatment, especially the skilful application of bandages to protect the exposed mucous surfaces, and to strengthen the tension of the *orbicularis* muscles.

Accessory Means.—Great benefit will result from frequent cold or tepid baths, and the occasional local use of *Calendula* lotion (ten drops of *Calendula* to two table-spoonfuls of water). If the deformity result from a cicatrix on the cheek, such as from a Burn or Abscess, and surgical measures have to be adopted for its removal, *Calendula* will be an excellent topical application. Also the Accessory Treatment recommended in the next Section.

122.—Tarsal Ophthalmia (*Ophthalmia tarsi*)—Granular Eyelid—Eczema Palpebrarum.

Definition.—An inflamed, thickened condition of the conjunctiva, and enlargement of its cilia, with disordered secretion of the meibomian glands, the cilia follicles, the conjunctiva and the skin itself, causing irritation similar to that from foreign bodies. Eczema in the eyelid is a chronic affection, occurs chiefly in the young, and the consequences to the lids may remain for years, and even for life. It is popularly termed *blear-eyes*.

Symptoms.—The granulations are rough and uneven, and may sometimes be detected by the touch; there is an abundance of pus secreted, so that the eyelids stick together, during sleep, becoming encrusted with dried mucus, chiefly from the meibomian secretion. The tarsal border becomes thickened and rounded, the lids are crusted, the *puncta lachrymalia* no longer catch the tears, and the excoriation and irritation of the edge of the lids are kept up by their constant overflow. The ulceration may be so deep as to destroy much of the skin, and even some of the tarsal cartilage. The usual variations common to Eczema are met with in this affection. It is

chiefly confined to the upper lids, but sometimes extends to the lower; and the eyelids of both sides are usually involved.

Causes.—Struma. Almost every case furnishes evidence of inherited or acquired Scrofula—enlarged lymphatic glands, swollen upper lips, sore ears, digestive derangements, tumid abdomen, or paleness and looseness of the skin. The disease may occur as the sequel of the eruptive fevers. Impure air, smoky and uncleanly dwellings, and especially over-use of the eyes in an unhealthy atmosphere, are also frequent causes.

Treatment.—The chief remedies are—*Merc.*, *Hep.-S.*, *Calc.*, *Carb.*, *Sulph.*, *Clematis*.

Puls. (in patients of blonde, feminine type, eyes better in open air, worse in warm room or near a fire; *Graph.* (when there are cracks at the commissures); *Kali Bich.*, *Thuja*, *Ars.*, *Zinc.* *Acon.* may be given intercurrently with any of the above, when the *pain* and *photophobia* are distressing.

See also Sections 74 and 105.

Accessory Treatment.—This should include frequent bathings with tepid milk-and-water, rest of the eyes, and avoidance of impure atmosphere, cold winds, indigestion, etc. Whatever may be the cause of the constitutional debility, it should be removed, and the general measures suggested in the Section on Scrofula carried out. Change of residence to a warmer part of the country, in obstinate cases, is often curative. *Local measures.*—The application of a simple cerate to the edge of the tarsi at night does good. When there is much agglutination in the morning, with scurf at the root of the eyelashes in the daytime, and a general unhealthy condition of the eyelids, a weak *Sulphur* ointment (*Sulph.* grs. v., adipis ℥ij.) is useful; it should be applied with a sable brush, morning and night, after the part has been cleansed, and every particle of dried secretion washed off with warm water and transparent soap.

CHAPTER V.

Diseases of the Ear.

123.—Diseases of the External Meatus.

1. Inflammation (*Inflammatio auris*).—This may exist, especially in early stages, as an independent affection; but it is usually connected with disease of the internal ear. If neglected, it is very likely to spread inwards. A fœtid discharge is indicative of disease within the tympanum.

Symptoms.—Dull, aching pain, increased by motion of the jaw. The meatus is swollen, red, tender, hot. The glands of the neck are often enlarged and tender. Hearing is generally not much impaired. General health is almost always feverish and disordered.

Causes.—Exposure to cold; blows on the head; irritation from gastric disorder or teething.

Treatment.—*Aconitum* (1x).—Feverishness; excessive pain and soreness: two drops in a little water every half-hour till relieved.

Belladonna.—Throbbing in the ear; sensitiveness to noise; red, shining swelling of the meatus. In alternation with *Acon.*, when the head is much involved, and the patient shows signs of Delirium. When the meatus only is affected, *Bell.* may be given alone.

Pulsatilla.—In less acute and more persistent forms of the disease. The remedy should be continued several days after the pain has ceased.

Sulphur.—Chronic Inflammation, and when the disease is very apt to *recur*. In these cases, and in scrofulous patients, *Sulph.* should be alternated with *Bell.* twice a day and continued for some time. *Mercurius* is also frequently required.

Chamomilla is sometimes of great service to children, and *Bryonia* to *rheumatic* persons.

"*Rhus. Tox.* (erysipelatous and vesicular); *Apis.* (with much swelling); *Graph.* (chronic inflammation, with blocking of the canal), and locally *nitrate of silver*, one grain to the

ounce; *Kali Mur.* (if there is exudation); *Calc. Pierata* (pustular inflammation, minute boils). A plug of cotton wool saturated with *glycerine* will often allay the pain, or the *meatus may be painted* with a solution of *Hydrochlorate of Cocaine*, five grains to an ounce of *distilled water.*"—*J. H. Clarke.*

Accessory Treatment.—Fomentations with hot water, the application of a bran poultice, or *Aconite* lotion, hot, in the early stage, will be found very soothing. After the poultice, a little cotton wool in the ear, for a short time, is necessary to prevent cold. Cold sponging of the ear, externally, at least once a day, will avert the tendency to inflammation.

2. Abscess.—If one, or more, small Abscesses or Boils form in the outer part of the meatus, as they sometimes do in persons of about middle age, they prove acutely painful, but if properly treated, lead to no very serious consequences. They are the products of inflammation of the sebaceous glands, are often coincident with the appearance of boils in other parts of the body, and correspond with styes on the eyelids. They are liable to recur.

Symptoms.—Acute, throbbing, darting pain in the meatus, great tenderness, tense swelling, temporary partial deafness, consequent on obstruction of the canal.

Treatment. — *Belladonna.* — Local redness; head-ache; flushed face; throbbing. If taken promptly, on the first appearance of inflammation, this remedy will often prevent the formation of the Abscess.

Silicea.—If *Bell.* does not prove arrestive, this medicine will often succeed.

Hepar Sulphuris.—If the Abscess be formed, its suppuration will be facilitated by this remedy, and its extension within the meatus prevented.

Sulphur.—This should be given after the resolution of the Abscess to prevent reformation, and to correct the constitutional diathesis.

For further treatment see Section 124 on Diseases of the Tympanum.

Accessory Treatment.—A free use of fomentations and poultices as hot as can be borne, will relieve the acute pain often experienced, and hasten the formation of matter. When *Bell.* is given internally to mitigate pain, a topical application will be serviceable. A little piece of lint may be moistened with two or three drops of the tincture, and introduced into the ear. Subsequent cold must be averted by avoiding draughts after fomentation, and by insertion of cotton wool in the ear. The latter is desirable for the absorption of the suppurating matter, but should be frequently changed, lest by drying the wool it should increase irritation.

3. Accumulation of Wax.—The increased secretion of the ceruminous glands is a cause of deafness, but not the sole cause in the majority of cases where it exists. It is frequently the sole *apparent* cause, and must therefore be treated *per se*, unless other symptoms indicate the application of other remedies. The disorder should not be neglected, for, besides causing annoyance and partial deafness, it may be the means of producing nervous symptoms, tinnitus, giddiness, mental confusion, unsteadiness of gait, and absorption of the bony walls of the meatus (especially in the aged). The wax may also become fluid and offensive.

Diagnosis.—The deafness, instead of being constant, is intermittent; the hearing is better in the morning, or after eating, or after rubbing the ear with the finger, or after insertion of the finger in the meatus. The deafness may be increased by cold and inflammation.

Treatment.—The wax is best removed by a careful use of the syringe, throwing a small jet of water, at the temperature of full blood heat, along the *roof* of the meatus. If the water be too hot or too cold it will cause giddiness. If pain ensue, the syringing should be discontinued. If the wax be not removed within a few days, a few drops of warm oil, or glycerine, or warm solution of soda, put in the ear at night will soften the wax and facilitate its removal. To ascertain the progress of removal, the ear should be frequently ex-

amined with the speculum. Dr. Pétrequin of Lyons has made experiments to discover the best solvent of wax, but found nothing so effective as simple warm water.

Absence of Wax.—*Sulph.*, *Graph.*, or *Spong.*, will be found remedial.

124.—Diseases of the Membrana Tympani.

1. Inflammation (*Myringitis*).—This may be either acute or chronic.

Symptoms.—The affection first manifests itself with slight uneasiness inside the ear, with buzzing sound. On examination, large red vessels may be seen upon the membrane, which is opaque, swollen, and from which there is not unfrequently a secretion of viscid mucus. There is some diminution of hearing. In the chronic form, the membrane presents a leaden appearance, is flattened, or dense and rigid; the vessels are congested; there is seldom any pain, though tinnitus is often considerable; hearing is greatly impaired.

Causes.—Exposure to cold or damp; or the application of cold or irritating substances to the ear, as a sequel of the exanthemata; or as coincident with affections of the skin or mucous membrane in other parts of the body: these causes are especially operative in weak, neglected, or scrofulous children.

Treatment.—Aconite (early *stage of inflammation*); Belladonna (*congestion; cerebral symptoms*); Pulsatilla (*inflammation following Measles; darting, tearing pains*); Mercurius (*pains extend to the teeth, and are worse in a warm bed; following Smallpox*); Chamomilla (*excessive, almost unbearable pain*); Sulph. (*convalescence*).

Accessory Treatment.—Fomentations and poultices will relieve the symptoms. If there be discharge, scrupulous cleanliness should be observed. The ear must be washed out and gently but thoroughly dried. Habitual cold sponging and friction of the outer surface of the Ear will lessen the liability to internal inflammation.

In all *inflammatory* and *catarrhal ear affections* the *teeth* should be examined; *decayed teeth* will often cause trouble

sympathetically in the ears. Some of the plates for false teeth made by dentists contain *Mercury*, and in sensitive persons these may occasion disorders of the *ears and hearing.*

2. Perforation.—The membrana tympani may be slightly perforated, only a very fine aperture existing, without any serious detriment to the hearing. There is a slight amount of deafness, but if the ear be generally healthy this is scarcely noticed. If, however, the aperture be large and the membrane be torn with a rugged edge, there is less hearing, and less probability of cure.

Diagnosis.—After the meatus has been cleansed with warm water, the aperture may be easily seen with a speculum; or if it be minute, its position is marked by a peculiar pulsation. If there be no obstruction of the Eustachian tube, the patient can blow air into the tympanum; this, if there be perforation, will escape through it into the meatus with a whistling sound.

Cause.—The membrane itself may be diseased, and ulcerate; or mucus may accumulate in the tympanum and find its way into the meatus by morbid destruction of the membrane.

Treatment.—If the inflammatory action which causes the ulceration is subdued, and if the formation of mucus within the ear can be prevented, the membrane may be restored. But as the secretion usually proceeds behind the membrane, the irritation it causes is kept up, and cure is rendered difficult. Mr. Hinton states, "Above, and almost even in the place of, all other things, the treatment of chronic perforations of the membrana tympani should consist in first washing out the cavity by means of alkaline solutions passed from the meatus through the Eustachian tube into the fauces. This is not painful unless irritation exists (which should be as far as possible subdued) or the tube is closed, which then should be first rendered patent. It is very simply done, and the only ill effect I have known ensue is a temporary giddiness, lasting a minute or two." "Another method of bringing

about a permanent cessation of discharge, when granulations are removed, or even before, is to employ talc (French chalk) in powder. All discharge being removed by syringing—for which purpose the patient should blow through the ear while the syringe is used—the surface should be thoroughly dried, as far as possible. (Lint rolled up, or the fringe of a towel, answers well.) A little of the powdered talc should then be taken up in a small glass tube and blown into the meatus by a sharp puff. An elastic bag is preferable to the mouth. This should be repeated, if necessary, until the bottom of the meatus is well covered. The process should be repeated daily, and it is seldom that many applications are necessary; but the ear should be, each time, well cleansed and dried. I know no more effective plan than this, but it is somewhat tedious."

125.—Diseases of the Tympanum.

1. Inflammation of the Mucous Membrane of the Tympanum.

Symptoms.—In mild forms, there are aching in the ear, tinnitus, impairment of hearing which becomes more serious with subsequent attacks, ultimately leading to entire deafness. In severe forms, there are intense throbbing, darting, bursting pain, extending over the side of the head, and aggravated by swallowing; loud and distressing noises; fever; delirium; congestion of the membrana tympani; inflammation of the throat; deafness, increasing in intensity. The symptoms in the milder form may rapidly subside; but the disorder may be the occasion of some of the most severe and dangerous diseases to which the ear is subject, and lead to permanent and incurable deafness. As, however, several months may elapse before restoration is complete, perseverance in the use of remedies is required.

Epitome of Treatment.—Acon. (*feverishness*); Bell. (*brain symptoms*); Cham., Merc., Sulph. (See the preceding Section.)

Accessory Treatment.—Warm fomentations, and poultices as recommended for "Myringitis."

2. Accumulation of Mucus within the Tympanum—Otorrhœa—Running from the Ears.

This is one of the most frequent and offensive forms of disease of the ear; it is also one of the most frequent and incurable causes of deafness. The *Ear-ache* of children, followed by purulent discharge, is probably occasioned by this disorder. It is also not unlikely to be a cause of *Convulsions* in children who suffer from other affections of the mucous membrane, and particularly of the lungs.

Symptoms.—The child puts his hands to his ears, *rubs them*, cries when they are roughly washed, and is unwilling to be jumped, or otherwise roughly moved. Uneasiness in the ear on blowing the nose or swallowing, which becomes continuous; increasing pain; tinnitus; headache; sense of bursting, relieved by suppuration; deafness, more or less complete.

Causes.—It usually follows an ordinary cold, and is commonly met with in scrofulous children. In such constitutions, it is likely to be a sequel to the eruptive fevers, Whooping-cough, Croup, or any exhausting illness; the tympanum should therefore be frequently examined for the detection of the first symptoms of the disorder.

Treatment.—*Mercurius.—Thick*, bloody, and *fœtid discharge*, accompanied by tearing pains in the affected side of the head and face, and *swelling and tenderness of the glands* about the ear. Also when the disease has followed *Small-pox*.

Hepar Sulph.—Discharge of pus and blood; and when the patient has been dosed with *Mercury*.

Pulsatilla.—Discharge of a thin watery character, or purulent, and when it follows *Measles* or *Mumps*. *K.-Bich.* is indicated by similar conditions.

Ac.-Mur.—A remedy of great value in affections of the ear consequent on *Scarlet* Fever; or Eczema, with burning itching.

Arsenicum.—Excoriating discharge, in *feeble* constitutions.

Causticum.—Otorrhœa with eruptions behind the ears and about the nose in scrofulous subjects.

Calcarea and Sulphur.—Tedious cases; and *scrofulous patients;* the former may be administered morning and

night for a week, to be followed, after a couple of days' interval, by the latter.

Ac.-Nit., *Iod.*, *Aur.*, *Merc.-Iod.*, *Sil.*, *K.-Hyd.*, or *Tellur.*, may also be required in some cases.

Kali Mur., *Borax.*—Six grains of finely powdered *boracic acid*, to be blown into the ear at bed-time; or *glycerole of Hydrastis* (*Hydras.*, eight drops to *Glycerine* half an ounce) dropped into the ear at nights; *Merc. Sol.* (discharging pus); a very dilute ointment of *Acid Nitrate of Mercury* (15 grs.) *Nitrate of Mercury* ointment (B.P.), to half an ounce of *Vaseline*, applied at night. *Plantago* internally and externally. *Caps.* (when the mastoid cells are involved).

Electricity of late has been successfully employed.

For the treatment of acute inflammation, the previous Section should be consulted.

General Measures.—The intractable character of this affection is often, in great measure, due to the neglect of that strict cleanliness which is so necessary to be observed. The irritating discharge, if allowed to accumulate within the meatus, undergoes decomposition, and gives rise to changes in the deeper structures of the ear, the nature of which may be inferred from the irritation and excoriation so often existing in the external orifice. A little fine wool, frequently changed, may be put into the ear when the discharge is declining, to protect it in cold weather; but even this should be done with great caution, particularly when the discharge smells offensively, for nothing can be more prejudicial than stopping the ear with cotton-wool to prevent its escape.

The *use of the syringe* by non-professional hands is often productive of more harm than good, and the practice should therefore be discountenanced, except with great *caution* once or twice a day, to cleanse the ear, which should be carefully dried immediately afterwards. To correct the *fœtor* of the discharge, which is often very great, a lotion of *Condy's Fluid* should be then injected, in the proportion of thirty drops to eight ounces of warm water.

Carbolic Acid lotion is also of great value in Otorrhœa. The following are the proportions in which it may be safely prescribed—

Carbolic acid ʒj.
Glycerine ʒj.
Distilled water ʒv. m.

The *improvement of the general health* of the patient is a point of great importance; for this purpose, change of air, and, in the autumnal months, sea-air, is often attended with most beneficial results. In the absence of sea-air, country-air, in a bracing district, is of great advantage. Cod-liver oil is also strongly recommended. See the *Accessory* and *Medicinal Treatment* in Section 72.

In cases that do not readily yield to this treatment, it will be necessary to cut through the *membrana tympani*, and by repeated washing out of the tympanum remove the mucus. The medicinal treatment must proceed contemporaneously with the surgical.

126.—Deafness (*Surditas*).

Varieties and Causes.—

a. Functional or nervous Deafness.—This variety depends upon constitutional debility; the same conditions which weaken and relax the general muscular and nervous systems act injuriously upon the ear. Functional Deafness is painless; it is better when the digestive organs are unimpaired, the spirits exuberant, and the weather fine.

b. From disease.—Under this head we may mention,—organic changes in the brain; excessive mental excitement; obstruction of the external and internal ear; thickening, Ulceration, and Perforation of the tympanum; accumulation of mucus, serum, or pus in the tympanic cavities; thickening of the mucous membranes of the Eustachian tubes; Paralysis of the acoustic nerve; the poisons of Typhus, Scarlet, or Rheumatic fevers, of Measles and Mumps, of Syphilis, of Gout, of excessive bile, and of quinine in large doses; various acute or chronic inflammatory affections, and disease of the throat (*Throat-deafness*). See previous Sections.

c. Deaf-dumbness.—This is due to congenital malformation of the ear, and is irremediable.

Other causes are,—the application of cold; sudden loud

noises, as the report of firearms; blows on the head, as boxing a child's ears; fractures which lead either to Concussion or Rupture of the auditory nerve; swelling of the lining membrane; accumulation of ear-wax, exfoliated scarf-skin, or other substances lodged in the ear-passage, Epilepsy, parturition, tumours of the brain, Neuralgia, etc. The Deafness that results from Catarrh is often but an aggravation of pre-existing Deafness—all the share the Cold has in the production of the disease being that of reducing the hearing power a little further, and so rendering the defect more obvious.

Diagnosis.—Mr. Hinton gives the best means of determining whether deafness is dependent on tympanic lesions or nerve-affections. He says, "The chief means of distinction is the tuning-fork, used in certain ways; the only drawback to its value being the fact that a certain number of persons, otherwise of good hearing, are unable to hear it when placed upon the head; but this is not often of consequence.

"I. In a normal state, a tuning-fork is heard before the meatus after it has ceased to be heard on the vertex.

"II. When placed on the vertex, it is heard more plainly when the meatus is closed.

"III. Consequently when one meatus is closed, the tuning-fork is heard most plainly in the closed ear.

"Consequently in cases of disease the following inferences seem justified.

"1. In cases of one-sided deafness, if the tuning-fork, when placed on the vertex, is heard more plainly in the deaf, or more deaf ear, the cause is seated in the conducting apparatus; if it is heard loudest in the better ear, the cause is probably in some part of the nervous apparatus.

"2. If on closing the meatus, the tuning-fork is heard decidedly louder, there is no considerable impediment to the passage of sound through the tympanum.

"3. If the tuning-fork is heard longer on the vertex than when placed close before the meatus, the cause of the deafness is in the conducting media.

"4. However imperfectly the tuning-fork may be heard when placed on the vertex, it gives reason for suspecting only, and is not proof of a nerve affection.

"I find it a good routine plan of examination to note in respect to hearing, (1) the distance by the watch; (2) whether watch heard on head; (3) how long the tuning-fork is heard on the vertex—whether equal or not to some average standard, the surgeon's own hearing of it, for example; (4) whether the sound is heard alike on both sides, or on which side it is louder; (5) the effect of closing each meatus; (6) whether it is louder on the vertex or before the meatus. If the deafness is considerable, and the tuning-fork indicates a normal condition of the tympanum, as *e.g.* that it is heard longer before the meatus than on the vertex, that its sound when on the vertex is increased by closing the meatus, and that it is heard best on the *least* affected side, I infer a 'nerve' affection. When thus assigned to the nervous system, the real nature of the affection remains altogether to be investigated, and it may in many cases have its real seat in parts altogether distinct from the ear, or in the tympanum itself, the impaired function of the nerve being entirely secondary."*

Prognosis.—In forming an opinion as to the chances of recovery, or of amelioration, the following circumstances should be taken into account:—age of the patient; hereditary tendency to Deafness, or the association of the malady with any constitutional disease; or with cerebral symptoms, or with the nervous temperament. If a patient come to us with Deafness which is hereditary, or who has suffered from scrofulous enlargement of the Tonsils, chronic Catarrh, Rheumatism, Gout, or secondary Syphilis, our hope of a favourable result will be greatly diminished. A slowly-progressive deafness of long standing, invariable in degree, if not dependent on some obstruction of the external meatus, is generally incurable. Sudden and painful onset of deafness, accompanied by Catarrh, is a sign of closure of the Eustachian tube, and affords favourable prognosis. Cerebral symptoms, whether idiopathic or traumatic, a nervous temperament and old age, are unfavourable to recovery. Deaf persons sometimes state that they can hear well under exceptional circumstances, as in the noise of a railway carriage, of a crowded thoroughfare, or amidst the whirl of busy machinery; these and similar

* Holmes' *System of Surgery*, vol. iii.

sounds, which suspend the hearing of healthy persons, furnish such a degree of abnormal stimulation as to excite the dull acoustic nerve to unwonted quickness. The inference from this unhealthy condition of the organ must be regarded as unfavourable for the prospect of recovery.

Treatment.—The cure of Deafness of course depends on the removal of the cause: in many cases this is practicable; in some it is not. In most cases, however, skilful treatment is successful, and it is very rare indeed after a course of remedies for a patient not to find his hearing-power decidedly and permanently stronger. *Recent* cases are of course the most hopeful. But long-standing cases, even when both ears are affected, are often benefited to a greater or less extent.

Epitome of Treatment.—

1. *From debility of constitution, Struma,* etc.—Phos. (*nervous*); Chin.-Sulph. (*nervous and periodic*); Iod., Ac.-Phos. (*Deafness for distant noise or tones*); Cact. (*with Palpitation*); Petrol. 3x, Spong., Ars., Sulph.

2. *From cold.*—Acon., Bell., Puls. (*recent*); Merc., K.-Hyd. (*chronic*); Dulc. (*from damp*); Bry. (*with Rheumatism*).

3. *After fevers,* etc.—Bell. (*with giddiness* or *after Typhus and Scarlet fever*); Puls. (*after Measles and Mumps*) Sil. (*after cerebrospinal Meningitis*); Chin., Sulph., Ac.-Phos.

4. *From suppressed eruption about, or discharge from, the ear.*—Sulph., Hep.-S., Aur.

5. *From enlarged Tonsils, Throat-deafness,* etc.—Mer.-Iod., K.-Hyd., Merc.-Cor., Iod., Bar.-Iod., Iod.-Sulph., Bell., Calc.-Phos., Bar.-Carb.

6. *From Concussion.*—Arn. (*also when deafness is accompanied with a crawling sensation in the ear*); Chin.-Sulph.

7. *Noises in the ear (Tinnitus aurium).*—Bell., Chin.-Sulph., Aur., Petro.; Puls. (*with deafness*); Caust., Graph. (*tinnitus in the form of reverberations*); Dig. (*noises like a steam-engine*); Hydras. (*whirring roar*); Nux V. or Ign. (*with unnatural sensitiveness to sound*); Bapt. (*roaring, confusion of mind, dulness of hearing*); Bell., Ver.-Vir. (*giddiness dependent on unequal distribution of blood*); K.-Brom. (*muddled brain, sense of weight on top of the head or on forehead*); Gels.

Phosphorus is particularly indicated in the deafness of old

persons; also in weakness of function; inability to distinguish articulations, though noises and musical tones are heard.

Electricity.—This is an agent deserving fuller and more careful investigation than has hitherto been given to it.

Under the treatment of deafness, Dr. Dyce Brown mentions two very common causes as worthy of notice:—

1. Plugging of the meatus with cerumen. The ear-speculum should be employed for its detection, and the ears syringed. See previous Section.

2. Close of the Eustachian tube, generally the result of Catarrh in the posterior nares and throat. The patient should close the nostrils and mouth, and force air up the tubes from the throat, as in the act of blowing the nose. This process should be repeated till a "crack" indicates the passage of the air to the membrana tympani. The act of swallowing reopens the tube, and allows the air to escape, relieving the feeling of tension which would otherwise remain. Many cases of catarrhal deafness are cured by this means.

Dr. J. Hayward says:—In all cases of measles, scarlatina, diphtheria, small-pox, chicken-pox, indeed in all fevers, the ears should be thought of; and, during convalescence, they should be carefully examined with the *speculum*, and appropriate treatment adopted for any morbid appearances that may have been induced. It would, indeed, be well, early in the convalescence from all these diseases, to syringe the ears every day or two with warm soap-suds, and dry and oil them. The necessity for this precaution has been made painfully evident by experience in the Throat, Nose, and Ear Department of the Liverpool Hahnemann Hospital, to which a great number of children are brought, whose education has been almost arrested by diseases of the *ear* and *deafness* following these *fevers*.

General Hints on Affections of the Ear.

(1.) *Wet or damp Ears.*—A frequent cause of disease of the ear is the reprehensible practice of leaving the head and ears of children imperfectly dry after washing. It is the more necessary to guard against this danger if deafness already exist, or there be any discharge from the ear. After bathing,

the greatest care should be taken to dry the head and ears *thoroughly*. As a further precaution, a piece of fine linen or blotting-paper should be twisted into a coil, and introduced into the cavity of the ear to absorb any remaining moisture.

(2.) *Washing and Drying.*—The screwed-up corners of a towel should never be introduced into the ear and twisted round in it, as it forces down the wax upon the membrane, irritates the passage, and produces small flakes of skin, which dry up, and become hard, so that pain, inflammation, and deafness may ensue. Washing should only extend as far as the finger can reach, but not into the cavity of the ear.

(3.) *Boxing the ears.*—Parents, governesses, and others, who have the care of children, should be aware of an accident very liable to occur from blows on the head or boxing the ears, namely, rupture of the *membrana tympani*, a membrane which closes the bottom of the meatus, and is stretched something like the parchment of a drum. The accident may be recognised by a sense of shock in the ear, Deafness, and a slight discharge of blood from the orifice ; and if examined by an ear speculum, the rent may be seen. There should be *complete rest* for several days, and a weak *Arnica lotion* used.

(4.) *Deafness the effect of severe sounds.*—The exposure of children to sudden intense sounds sometimes leads to serious consequences, as fracture of the tympanum, Convulsions, or other cerebral accidents. Deafness has so frequently resulted from impressing too direct a shock upon the tympanum, that it is advisable for sportsmen and artillerymen to introduce a little cotton wool into the ears before encountering the detonations of firearms. A diseased state of the nervous system would render this precaution the more necessary, as noises that are simply inconvenient to persons in health, become positively injurious to nervous patients.

(5.) *Deafness not stupidity.*—Another point not undeserving of notice is the case in which a child, from being slightly deaf, has been thought to be stupid or obstinate. " Very sad is it to think how often a child is thus punished for his misfortune, and, it may be, irremediable injuries inflicted on the mind or temper of this poor victim of unintentional injustice. It is

hardly necessary to insist upon the care which is requisite in examining the state of the hearing-power in a child, or to refer to the fact that children will often say, and doubtless think, that they hear a watch tick when they do not" (*J. C. Foster, F.R.C.S.*).

(6.) *Wet compress.*—A small wet compress, covered with oiled silk or tissue, worn over the nape of the neck, as recommended for Ophthalmia, is equally applicable in affections of the ear, especially when of an obstinate nature; and if persevered in steadily for some time will frequently relieve Deafness.

(7.) *Hearing Trumpets.*—These are advisable in cases of confirmed deafness; but they should be selected so that there may be no irritation of the meatus in the use of them, no metallic resonance, no excessive noise communicated to the auditory nerve. The patient's sensations will be a tolerably correct guide.

(8.) *Dilutions of the medicines.*—Lastly, a remark may here be made, bearing on the treatment of the diseases of the ear. In all *chronic* affections of this organ, especially when of a *nervous* character, the higher dilutions (6x to 12x) of the different medicines are often more efficacious than the lower (1x to 3x); but in *acute* attacks the 1x acts admirably.

CHAPTER VI.

Diseases of the Nose.

127.—Ozæna (*Ozæna*).

Definition.—Ozæna (from a Greek word signifying a *stench*) is a disease in which there is Ulceration of the mucous membrane of the nose, from which *fœtid*, purulent, or sanious matter is discharged. There is often lachrymation from obstruction of the ducts leading from the lachrymal glands to the nose. The nasal cartilages are sometimes destroyed; so also are the senses of smell and taste. There may be disintegration of the

nasal bones in severe cases, and even exfoliation of the palate and superior maxillary bones.

CAUSES.—Uncured Catarrh; fevers; Syphilis; mechanical injury; foreign bodies in the nostrils; or it may arise from an unknown cause. A strumous constitution no doubt predisposes to the disease.

TREATMENT.—The disease, especially if chronic, is not easily cured, because the cartilage and bones are involved, and because the ulcerous secretions are retained by the peculiar conformation of the nose; but in most cases it may be greatly benefited.

Aurum.—Pain above the nose with redness and swelling; heat and soreness of the nostrils; yellowish-green or yellow discharge; half-watery, half-dry fœtid pus.

Kali Bich.—Thick, tenacious, sometimes bloody, discharge, in the form of "elastic plugs." (2x dil. sometimes required.) It should be persistently employed.

Iodium.—Great *fœter;* nose swollen and painful; the Schneiderian membrane undergoing putrid Ulceration.

Mercurius Biniod.—Sanious discharge; destruction of the septum and bony structure of the nose.

Acid.-Nit.—Syphilitic Ozæna; and when the patient has been drugged by large doses of *Mercury.*

Arsenicum.—Ichorous discharge; fœtid, and malignant cases, particularly if the constitution is much shattered.

Zinc.-Met.—Swelling and *soreness* of the nose; loss of smell, dryness, and lachrymation.

Cyclamen (*frequent sneezing*); Gels. (*watery flow*); Phyto. (*mucous flow*); Sticta (*dryness*); Puls. (*retarded menstrual discharge, or leucorrhœa*); Sang., Alum., Magnes.-Mur., Bapt., and Hydras. have also proved remedial.

A case of eight years' standing has been said to be cured by *Hydr.-præcip.-rubr.* 3, int.; and ointment of the same, ext., where the crusts could be reached.

Cadmium Sulph.; locally, spray of a solution of *Muriate of Hydrastia,* one grain to the ounce.

Dr. Raue mentions the following as the best remedies: *Calc. Carb.* (purulent discharge, fœtid, thick, yellow reddish); *Cuprum* (affection of frontal *Sinuses*); *Phos.* (discharge yellow

or yellow-green); *Puls.* (thick and fœtid discharge); *Sulph.* (slimy acid discharge); *Silic* (secretion tough, slimy, purulent).

Accessory Measures.—Perfect cleanliness of the nasal passages is imperative; the nose may be syringed with a lotion of *Condy's Disinfecting Fluid* (thirty drops to eight ounces of warm water 68° or 70°); or tincture of *Iodine* (eight drops to eight ounces of water), injecting with a *large* syringe, daily. Great benefit has ensued, in the hands of several practitioners, from sniffing up the nostrils, three or four times a day, a solution of salt—a teaspoonful of *salt* mixed with a tumbler of water.

128.—Epistaxis (*Epistaxis*)—Bleeding from the Nose.

Although this is ordinarily a trifling affection, it requires some discrimination to decide when to interfere and when to let it alone; for it may be a symptom of the most diverse conditions of the constitution.

In simple cases, when the discharge is trifling, no treatment is necessary; that suggested below is for cases in which the bleeding is excessive, long-continued, oft-recurring, or in which it arises from a debilitated state of the constitution; for then the loss may be serious, and indicate a grave systemic condition.

Symptoms.—Giddiness, weight, or oppression in the forehead often precede the Hæmorrhage. Generally only one nostril bleeds. Sometimes the blood, instead of escaping in front, passes through the posterior nares into the fauces, and thence into the larynx or stomach. In the latter case, without careful investigation, it might be mistaken for Hæmorrhage from the lungs or stomach.

Causes.—*Injuries*, as a blow on the nose or some part of the head; *Congestion* of the head, from passion, over-exertion, coughing, etc.; or it may be *idiopathic*, as in the hæmorrhagic diathesis, Apoplexy, old age, etc. The plethoric seem to be liable to Epistaxis, from an excess of blood, the anæmic from an altered condition of this fluid, and the diseased from degenerative changes in the blood-vessels. Sometimes it takes place from suppression of Hæmorrhoids, or, in women, from absent,

scanty, or irregular period. In the latter instances it is said to be *vicarious* of menstruation. The *predisposing* cause is the extreme vascularity of the Schneiderian membrane—the mucous lining of the nasal cavities: thus, it is well known to be readily susceptible to cold, Syphilis, and other influences. As a consequence of this congestive tendency, the capillaries become distended and Hæmorrhage may result.

Treatment.—*Hamamelis.*—*Venous* Hæmorrhage, where the blood oozes or drops from the lining of the nose; Epistaxis from the hæmorrhagic diathesis; also when the *degenerative changes* in the blood-vessels, as in old age, favour the discharge.

Aconitum.—Hæmorrhage from *arterial excitement*, or from passion. It is specially suited to *plethoric* persons.

Belladonna.—Cerebral Congestion; Epistaxis preceded by *throbbing Headache* and fulness in the forehead and temples. *Erigeron* is also valuable for congestive cases.

Carbo Veg.—In aged persons with weakened constitution; or when the bleeding is profuse and persistent.

Millefolium.—Arterial blood flowing without apparent cause, or *lacroms.*—*Dark* blood; also to eradicate predisposition from the upper part of the nose.

Phosphorus.—Bruise-like marks (*ecchymosis*) on the body.

Nux V.—Plethoric persons; tendency to congestion of liver, to Piles, Constipation, and Dyspepsia.

Arnica.—From a blow, fall, or physical exertion.

Secale.—During fevers, etc., great weakness, cold sweat, blueness of skin.

Podoph. or *Puls.*—When the Hæmorrhage is *vicarious* of the monthly period.

China.—After the bleeding, when it has been excessive; also in anæmic and weak persons.

Accessory Means.—The application of cold water or ice to the forehead, neck, or back, or pushing a piece of ice directly up the nostril, raising the arms above the head, and holding them so for a short time, or pressing horizontally on the cheek bones with the fingers, just above the bleeding nostril, and so compressing the blood-vessel, generally arrests the Hæmorrhage promptly. In a slight case a patient may sniff

up *Tannic acid*. If, in spite of these means, the bleeding continues, a piece of lint should be rolled into the shape of the nostril, saturated with the tincture of *Hamamelis*, or *Muriate of Iron*, and twisted rather tightly into the bleeding nostril, or into each, if the bleeding comes from both. Before inserting the plugs any clots of blood should be removed. This treatment is recommended on two grounds—the *styptic* effects of the remedy, and the *support* of the vessels by the tightly-fitting plug. The patient should be placed in the recumbent posture, and the temperature of the room reduced. Dr. Martin, of Geneva, arrests Epistaxis, which generally comes from one nostril, and most frequently from the anterior third of one of the nasal fossæ, by compressing the facial artery of the side upon the upper jaw, near the nose; this diminishes the effusion of blood into the nasal cavity, and almost invariably stops the bleeding. In a few cases, Dr. Martin adds, this plan has failed; and plugging of the nostrils has also failed: but the patients were drunkards.

Plethoric persons predisposed to Epistaxis or to Congestions should lead a temperate life, avoid stimulants, use frequent ablutions of cold water, and take moderate exercise daily in the open-air. *Immoderate* exertion, fatigue, and much stooping, are injurious. Delicate persons, of spare habit, are benefited by nourishing food. When bleeding from the nose frequently or periodically recurs, a change of climate, and a more or less complete change of habits, are generally necessary to overcome the predisposition.

129.—Polypus Nasi (*Polypus Nasi*)—Polypus of the Nose.

Varieties.—Polypi are of two kinds, and are generally located either in the nose, ear, throat, womb, or rectum.

a. Gelatinous Polypi are composed of the elements of the mucous membrane; they are pear-shaped, of yellowish colour, and consist of several soft, pedunculated, pendulous Tumours, streaked with a few blood-vessels. Their texture is so spongy as to imbibe atmospheric air, which renders them larger in

damp weather than in dry. Polypi of the nose are usually numerous and of various sizes, and sometimes extend to the fauces, causing great obstruction in breathing. After removal they are apt to return.

b. Fibrous Polypi are much less common; they are often of a malignant character, and the cause of much suffering.

Symptoms of Nasal Polypi.—A nasal sound in the voice; the patient acquires the habit of keeping his mouth open to facilitate breathing; difficulty of swallowing liquids; the nose is enlarged externally on the affected side, and on looking up the nostril the Polypus may be seen. In consequence of the stuffy symptoms which a Polypus occasions, it may at first be mistaken for a cold in the head. But on the nose being violently blown, the Polypus descends and appears near the orifice, causing the obstruction to return, contrary to the usual result of such an operation. If the Polypus is in the upper part of the nose, one nasal opening should be closed and the patient be requested to blow through the other; if this be impracticable, the presence of Polypus is probable.

Treatment.—*Calc.-C.*, *Teuc.*, *Merc.-Iod.*, *K.-Bich.*, *Phos.*, *Nit. Ac.*, *Thuja*, *Sang.* (internally, and powder of it externally), and *Opi.* have proved the most successful remedies.*

In the choice of one of the above remedies, reference should be made to the general constitution of the patient, and it should be used locally, in a more concentrated form, as well as internally.

In most cases it is necessary to remove these growths by surgical means. After their removal, dilute *Ac.-Nit.* should be applied by a long camel's-hair pencil, and also sniffed up.

130.—Loss or Perversion of the Sense of Smell

(*Odoratus perditus vel perversus*).

This condition is generally consequent on some other affection, especially chronic Catarrh.

* Mr. Bryant, in the *Lancet*, recommends *Tannin* to be blown up the nostril as a snuff through a quill daily, and cites six cases in which this treatment has been completely successful in the gelatinous kind.

TREATMENT.—When *recent*, and dependent on a catarrhal Cold, or Rheumatism, *Aconite* in a low dilution will be readily curative. We have cured *chronic* cases, from similar causes, with *Puls.* or *Merc.*, according to the condition present. *Sulph.* is also valuable in *perverted* smell.

Gels., *Sang.*, *Sep.*, and *Calc.* have been recommended.

CHAPTER VII.

DISEASES OF THE CIRCULATORY SYSTEM.

131.—Diseases of the Heart and its Membranes

(*Morbi cordis et membranum ejus*).

DISEASES of the heart command much attention in the present day, not only on account of the frequency of their occurrence, and the serious consequences they often involve, but also as the result of our more perfect acquaintance with the organ both in its healthy and morbid conditions.

CAUSES.—The most common causes of Heart-disease are: Rheumatic fever in the young (see Section 62); over-work of mind and body, anxiety, and too little rest in middle life, and Kidney-disease and Atheroma in older persons. The potency and frequency of the second class of causes are obvious. Life is too frequently one round of perpetual excitement, business haste or competition, and railway-speed pursuit of pleasure or gain. The demands thus made on the ever-active organ lessen its nutrition, impair its structure, and imperil its action.

Touching diseases of the heart, we may at once state that all affections so characterised are not *organic*, but often merely functional, and due to temporary causes, as Palpitation from debility, Indigestion, etc. On the other hand, cases of sudden death frequently occur, which are supposed to be due to Apoplexy, but which are consequent on Heart-disease.

TREATMENT.—Organic affections of the heart may be relieved, and life considerably prolonged, by judicious treatment.

Professional judgment and experience are, however, specially necessary. Remedies are suggested for heart affections resulting from Rheumatic fever, Sec. 62. For affections of the heart consequent on over-exertion and insufficient rest, *Arnica* is an excellent remedy. Other remedies, for affections from other causes, are pointed but in the following Sections.

132.—Pericarditis (*Pericarditis*).

Definition.—Inflammation of the fibro-serous membrane which invests the heart. The inflammation causes the effusion of a serous fluid, which sometimes becomes purulent, producing *suppurative Pericarditis*. This may affect only a portion, or the whole, of the heart. The substance of the heart itself is not at first affected; but if the inflammation continues for some time, the serum infiltrates the muscular texture. By the continuance of the disease the pericardium is thickened in proportion as the infiltration extends through its substance, and the serum remains unabsorbed. If the disease becomes chronic, the thickening of the membrane impedes the action of the enclosed heart.

Causes.—It is rarely idiopathic, but usually follows acute Rheumatism, and Nephritis. It is also consequent on Pyæmia, the Exanthemata, Pneumonia, Pleuritis, Tubercular Meningitis, and other constitutional diseases. Indeed, there is scarcely a malady with which it may not be connected.

Symptoms.—Pain in the region of the heart, extending over the whole sternum, and sometimes under and down the left arm, accompanied by disturbance of the heart, tightness of the chest, distress, and inability to take a long breath or to cough; restless, anxious expression of the countenance. These are the signs when Pericarditis is the consequent of rheumatism; when it is not so there is little pain, and the symptoms are obscure. The following, however, may be observed—pallor, and occasional distress of countenance; unwillingness of the patient to lie on the left side; and if there be pain about the heart it is acute, and shoots upwards to the shoulders, and is increased by movement and pressure.

Feverish symptoms may exist, and the pulse rise and be irregular. Yet they may all be absent; the action of the heart may gradually subside in three or four days, or stop suddenly. The most striking symptom in Pericarditis, *before exudation has taken place*, is a double friction—"*to and fro*" —sound, in the region of the heart. It is, however, not necessarily present in the disorder, nor is its presence an indubitable proof of the existence of the disorder; it is therefore of no value except as confirmatory of other symptoms. As a means of distinguishing pericardial from pleuritic effusion, it may be observed that in the former case the left side is dull in front and resonant behind. Inspection shows a protrusion of the left cartilages and ribs, and the widening of the interspaces in the young, whose thoracic walls are not fixed. The heart's beat may be weaker under the hand. Extension of dulness under percussion towards the left side, beyond the point at which the apex beats, is a positive sign of the existence of fluid in the pericardium.

Treatment.—This must depend upon the causing or associated disease.

Aconite.—A double friction-sound in rheumatic cases; labouring, upheaving action of the heart.

Spigelia.—Pulse full and bounding or irregular; irritable condition of the nerves of the heart; thumping of the heart; dyspnœa.

Bryonia.—In rheumatic cases, in alternation with *Acon.* or *Spig.*

Arsenicum.—When there is much effusion; after Scarlet fever; coincident with Bright's disease. *Colchicum* is also useful in the latter case.

Cactus.—Palpitation, whirling of the heart. *Asclepias-Tub.* and *Merc.-S.* have been also recommended. See Sections on "Acute Rheumatism" and "Nephritis."

Dr. Lade prescribes *Arn.*, *Dig.*, *Iod.*, and *Sulph.*

Accessory Treatment.—The heart should be covered with hot linseed-meal or bran poultices. (See Sec. 34.) Gentle friction over the heart often gives relief.

133.—Endocarditis (*Endocarditis*).

Definition.—Inflammation of the fibro-serous membrane which lines the interior of the heart.

The remarks made respecting Pericarditis in the previous Section, are applicable to this disease. The causes, symptoms, and constitutional conditions are the same in both, and the diseases generally combined. Endocarditis is often latent, and the friction-sounds of Pericarditis render it difficult to determine the presence of the cognate disease.

Diagnosis.—The friction-sounds of Pericarditis are confined to the region of the heart; the valve-murmurs of Endocarditis are heard *beyond* that region. Both the aortic and mitral valves are generally affected: but if only one be diseased it is generally the mitral. In the young, who are subject to Acute Rheumatism, disease of the mitral valve, and in the old, who are subject to Atheroma, disease of the aortic valve, predominates. The former is more frequently fatal. A systolic mitral murmur heard extending an inch and a half beyond the nipple is most probably due to mitral regurgitation. If an aortic murmur exist, it can only be distinguished in the neck, just above the sternum, over the innominate artery. If after listening to the first sound, the second sound be observed to follow clearly and distinctly, there is probably no affection of the aortic valves, even if there be a loud systolic murmur. If, however, the second sound be indistinct, inaudible, or prolonged, or be replaced by a diastolic murmur, acute Endocarditis may be suspected or detected. The muscular and functional state of the heart should also be examined. If its force and vigour are above or below the natural standard, if it be liable to excitement from slight cause, if there be irregularity of action with regard to rhythm, and if the pulse be feeble and the arteries be imperfectly filled, the tissues of the heart are implicated.

Prognosis.—If the valves thicken or shrink, or if the edges of the valves adhere, immediately or after some time has elapsed from the occurrence of the acute attack, and the lesions remain persistent, Hypertrophy will follow. The danger is increased as dilatation of the cavities of the heart

exceeds the Hypertrophy, as the muscular tissue of the heart becomes soft and flabby, as the blood becomes impoverished and the tone of the system is lowered. Endocarditis, *per se*, is rarely fatal, but the consequent valvular disease ultimately becomes so. A feeble pulse, imperfect filling of the arteries, rigors, sudden swelling and pain of the spleen, Albuminuria, Hemiplegia, softening or fatty degeneration of the tissues of the heart, are unfavourable signs.

Treatment.—The disease is very intractable, and the treatment must, as in Pericarditis, depend upon the associated disease.

Aconite.—This is the most important remedial agent, especially in rheumatic cases; thickening of the mitral valve; deposit in the substance of the valves near their free margins.

Spigelia.—Rheumatic inflammation; violent action of the heart; Angina Pectoris.

Chloral Hyd.—Valvular disease, with enlargement of the abdomen and lower extremities and dropsical tendency; fluttering in the chest; distention and violent action of the blood-vessels of the neck; dyspnœa; laboured breathing.

Naja (acute attack). *Lachesis* (ulcerative).

In *Rheumatic Endocarditis* Dr. Burnett recommends *Aur. Fol.* and *Nat. Sulph.*

See previous Section on "Pericarditis;" also Sections on "Acute Rheumatism" and "Nephritis."

134.—Hypertrophy (*Hypertrophia*)—Enlargement of the Heart (*Dilatatio*).

Definition.—An abnormal growth of the muscular tissue of the heart by thickening of the walls.

Simple Hypertrophy is the thickening of the walls without change in the capacity of the cavities. *Eccentric Hypertrophy* is the thickening of the walls, with dilatation of the cavities. *Concentric Hypertrophy* is the thickening of the walls, with diminution of the cavities. The simple form is not common; the eccentric form is of most frequent occurrence.

Causes.—Excessive effort of the heart to overcome obstruction to its action; obstruction to the forward flow of blood due to deposits on the semi-lunar valves, to disease and contraction of the arteries, to Aneurism of the aorta, or the pulmonary artery; valvular insufficiency; defective muscular nutrition; diminution of nerve-force; excessive physical exertion and consequent exhaustion of the heart; general plethora.

Symptoms.—Continued disease of the valves produces enlargement of the heart, and is therefore symptomatic. Other symptoms are strong, impulsive movement of the heart; dulness of sound in the region; sometimes bulging of the left side felt by the hand; palpitation; irregularity of rhythm; distress of the heart; shortness of breath on exertion; small and feeble pulse; tickling cough; slight attacks of Bronchitis.

Treatment.—*Digitalis.*—Strong beatings of the heart with contractive pains under the sternum; sense of oppression. It is a most efficient remedy in restoring the regularity of the movements of the heart.

Aconite.—Acute palpitation; great distress.

Cactus.—Hypertrophy with valvular disease; Dropsy.

Ac.-Plumbum.—Stitches during inspiration; anguish of the heart; palpitation; rush of blood to the heart during a rapid walk.

Arsenicum.—Dilatation of the heart; tendency to Dropsy.

Apis.—First appearance of Dropsy.

Ferrum.—Constitutional debility.

Spigelia and *Bromine* are also useful.

Arn., Aur., Chin., Colch., Dig., Ant. Tart., Gels., Lyc., Mur., Phos., Sulph., Tabac., Lobel., Ver. Alb., are also recommended by Dr. Lade.

Accessory Treatment.—Warm fomentations will relieve acute symptoms. Ascending stairs, climbing hills, long walks, violent exertion of every kind, should be avoided. Excitement and anxiety are prejudicial. Rest of body and mind should be secured as much as possible.

135.—Angina Pectoris (*Angina Pectoris*)—Breast-Pang.

Definition.—Sudden, severe paroxysms of pain, or Spasm of an enfeebled and diseased heart, with a constricted, burning sensation, and intense anxiety, chiefly occurring in elderly persons, or past the middle period of life.

Symptoms.—The patient is seized with a sudden, dreadful pain, which centres in the heart, and extends over more or less of the anterior portion of the chest, up the shoulder and down the arm. There is an agonising sense of anxiety, faintness, fear of instant death, palpitation and dyspnœa, so that if walking he is compelled to stop and to fix on the first object that offers support, and so remains, pale and covered with a clammy perspiration. The paroxysms may terminate in a few minutes, or last for hours, and are liable to recur with increased severity, till at length one proves fatal.

Causes.—*Disease of the heart*, or obstruction of the coronary arteries, in consequence of which the muscular fibres of the heart become impaired. Under such conditions a paroxysm may be brought on by over-exertion, flatulent distention of the stomach, mental excitement, or even a frightful dream.

Epitome of Treatment.—

1. *For the diseased condition.*—Ars., Dig., Verat.-Vir.

2. *For the paroxysm.*—Chloric Æther, Ac.-Hydroc., Acon., Cact., Spig., Samb., Naja.

Leading Indications.—

Aconitum.—Recent cases, and for plethoric patients; when there is great sense of suffocation, anxiety, and throbbing.

Digitalis.—Cases in an advanced stage, the paroxysms recurring frequently and suddenly.

Veratrum.—Slow, intermittent pulse, cold extremities, cold perspirations.

Arsenicum.—Extreme *dyspnœa*, increased by the slightest movement, marked debility, pale and *haggard face*, feeble and irregular pulse, and dread of immediate death. *Ars.* is also valuable as an agent for warding off the paroxysms of this painful disease.

Cactus Grand.—When there is "a feeling as if the heart

were grasped and compressed as with an iron hand" (*i.e., Spasm*); Rheumatism.

Sambucus.—Violent dyspnœa; awaking from sleep with a suffocative sensation; dreadful anguish about the heart.

Cuprum Acet.—Drs. Bayes and Holland have both reported cases of Angina cured by this remedy. Although we have had no personal experience with the remedy in Angina, it is doubtless of great value in this terrible affection.

Nux Vomica.—Indigestion, the attacks being attended or followed by *flatulence.*

Nitrite of Amyle.—This is a remedy highly spoken of, and is esteemed by some as the best palliative for Angina Pectoris. It is best given by inhalation; care must be taken with its use.

Dr. Burnett recommends *Aurum,* and Dr. Lade adds to the list of remedies *Arn., Bry. Puls., China, Coch., Ferr., Sulph.*

Dr. J. H. Clarke recommends the following: "Act. R. (*pain at heart, with rheumatic symptoms*); Cupr. Met. (*Angina with asthmatic symptoms and cramp*); Lil. T. (*oppression of breathing, great restlessness, Tobacco Angina, dragging down sensation*); Lith. Carb. (*pain at heart when vomiting, or before and during menses*); Carbo Veg. (*when there is excessive flatulence*); administered half an hour before food is taken."

Accessory Treatment.—Brandy or some other diffusible stimulant,* in frequent small doses; a large hot bran-poultice over the region of the heart; and warmth to the extremities.

136.—Syncope (*Defectio animæ*)—Fainting-Fit—Swooning.

Definition.—A loss of volition and muscular power, with partial or complete loss of consciousness, due to defective nervous power.

* Dr. Anstie, in *Reynolds's System of Medicine,* recommends *Sulphuric Ether* in the purely nervous form of Angina Pectoris, and mentions a case under his care, which he is sure would have long since ended fatally in one of the agonising attacks of spasmodic heart-pain, but for the discovery that by taking a spoonful of æther immediately on its commencement, the patient can greatly mitigate the attack, and has continued to do so with undiminished effect for the last three years.

Causes.—*Debility* from constitutional causes, or from loss of blood or other animal fluids; Hysteria; emotional disturbances—fright, sudden joy, grief, etc. Many persons faint on seeing blood or a wound, or from the sight of operations, etc.

Epitome of Treatment.—

1. *For the fit.*—Camph., Mosch., Ammon.-Carb., or Acon. If the patient be unable to swallow any of the above remedies in strong tincture, especially the first two, they may be administered by olfaction. At the same time, all tight clothing should be loosened, the patient exposed to cool air, and cold water dashed on the face. The invariable tendency to the horizontal posture is a conservative one, and should not, therefore, be interfered with.

2. *For the debility.*—Chin., Ars., Iod., Ver.

3. *Fainting from affections of the heart.*—Mosch., Dig., Ver.-Vir.

4. *Hysteric fainting.*—See Section 97.

Dr. Lade also recommends *Aur.*, *Calc. C.*, *Ferr.*, *Lach.*, *Naja*, *Phos.*, *Phos. Ac.* (deficiency of nervous or muscular energy); *Acon.*, *Coff.*, *Ign.*, *Cham.*, *Opi.* (emotional disturbances); *Arg. Nit.*, *Bell.*, *Cycl.*, *Coni.*, *Ferr.*, *Graph.*, *Nat. Mur.*, *Puls.*, *Sep.*, *Sulph.* (Amenorrhœa, Anæmia, chlorosis); *Ang. C.*, *Anac.*, *Crot.*, *Gels.*, *Ham.*, *Helon.*, *Ipec.*, *Nux.*, *Sab.*, *Sec.*, *Sen.*, *Sep.*, *Staph.*, *Sulph.* (leucorrhœa, menorrhagia and other exhausting diseases); *Cact.*, *Arn.*, *Ruta*, *Rhus Tox.* (long continued mental or bodily exertion).

Preventive.—Reference must be had to the constitutional state which causes fainting from trifling circumstances, in order to correct the tendency.

137.—Palpitation and Irregularity of the Action of the Heart (*Palpitatio et tumultus cordis*).

In a healthy condition, we are scarcely sensible of the heart's beat; the perfection of action, therefore, is indicated by entire unconsciousness that such action exists at all. Palpitation is evidence of a want of balance between the

blood to be driven and the power of the heart to drive it. It is not, then, evidence of excessive power, but that the muscular power has been taxed and found unequal to the demand. "It is laboriousness, not excessive power, that is indicated by Palpitation" (*Fothergill*). When, however, the pulsations of the heart become much increased in force or frequency, or both, the unpleasant sensation known as "Palpitation" is experienced.

TABLE OF THE CHIEF DIFFERENCES BETWEEN ORGANIC AND FUNCTIONAL DISEASE OF THE HEART.

ORGANIC.	FUNCTIONAL.
1. Palpitation usually comes on slowly and insidiously.	1. Palpitation generally sets in *suddenly*.
2. Palpitation, or distressed action, though more marked at one time than another, is *constant*.	2. Palpitation is *not constant*, having perfect intermissions.
3. Percussion elicits *increased extent* and degree of *dulness* in the region of the heart.	3. Dulness in the region of the heart is *not extended* beyond the natural limits.
4. *Lividity* of the lips and cheeks, congested countenance, and Anasarca of the lower extremities, are often present.	4. There is *no lividity* of the lips and cheeks, countenance often chlorotic, and except in extreme cases, there is no Anasarca.
5. The action of the heart is *not* necessarily *quickened*.	5. The action of the heart is generally *quickened*.
6. Palpitation often *not much complained of* by the patient, but occasionally attended with *severe pain extending to the left shoulder and arm*. (See "Angina Pectoris.")	6. Palpitation *much complained of* by the patient, often with *pain in the left side*.
7. Palpitation is *increased by exercise*, stimulants, and tonics, but is relieved by rest.	7. Palpitation is increased by sedentary occupations, but *relieved by* moderate *exercise*.
8. Is more common in the *male* than the female.	8. Is more common in the *female* than the male.

PALPITATION AND DISEASE OF THE HEART.—We infer Palpitation to be the consequence of functional disorder, as of Indigestion, when it occurs only occasionally, and when the action of the heart is uniform during the intervals. In medical practice the fact is often observed, that patients with

serious organic disease of the heart rarely suspect anything radically wrong until the disease has made considerable advances; while patients with *mere functional disorder* of that organ frequently *entertain the gravest apprehensions*. Most cases of palpitation are from functional disorder and not from structural disease, and are consequently quite curable. Sometimes, from nervous irritability, some of the great arteries, particularly the abdominal aorta, take on an inordinate action, which might be mistaken for Aneurism.

Causes.—*Predisposing.*—A nervous temperament; Hysteria; a full habit; and Disease of the heart. *Exciting.*—Excessive joy, grief, fear, and other mental emotions; severe or prolonged exertions; profuse discharge; menstrual derangements; a disordered—especially an overloaded—stomach; flatulence; etc. Whenever the heart is acting under disadvantageous circumstances, Palpitation is never long absent. Thus any cause which, by pressure on the diaphragm, diminishes the space for the heart and impedes its beat, places the heart at a disadvantage, and Palpitation takes the place of the normal quiet contraction. *The excessive use of tea* is one of the most common causes of functional irregularities of the heart's action in weak or nervous women. In some persons Palpitation follows *tobacco smoking;* it may result from the administration of other deleterious agents. In such cases, of course, a cure can only be expected after a relinquishment of the noxious substance.

Treatment.—The subjoined has reference to simple Palpitation, unconnected with any organic disease.

Epitome of Treatment.—

1. *Palpitation from emotional causes.*—Acon. (*from excitement*); Ign. (*from grief*); Coff. (*from joy with wakefulness*); Cham. (*from passion*); Opi. or Ver. (*from fright or fear*).

2. *From over-exertion.*—Arn.

3. *From Congestion.*—Acon., Bell.

4. *From Indigestion.*—Nux. V., Puls., Lyc.

5. *Nervous Palpitation.*—Mosch., Spig., Bell., Acon., Cact., Ars.

Dr. Burnett says *Aurum* is indicated in Palpitation and Debility in the aged.

Leading Indications.—

Aconitum.—Palpitation from the least *excitement*, with anxiety, chilliness, *numbness of the extremities*, or a sensation as if the heart ceased to beat; short, hurried breathing; *hot, flushed face.* It is specially adapted to *plethoric* patients.

Belladonna.—Oppression, tremor, pain about the heart; *throbbing in the neck and head*; *redness of the face.*

Digitalis.—Great irregularity, without any assignable cause, with *inability to walk or lie down;* great distress. Three or four drops of the strong tincture every two or three hours. But an *infusion* of Digitalis is generally more effective than the alcoholic tincture.

Cactus.—Sensation as if the heart were *whirling* round, or *tightly grasped,* or jerking and intermittent action.

Pulsatilla.—Hysterical symptoms; and in females suffering from deranged period.

Lachesis.—Frequent deep sighing, occasional fits of suffocation and fainting, weak pulse, stitches in the left side; patient suddenly awakes with difficulty of breathing and sensation of choking and suffocation.

Administration.—During a sudden attack, a dose should be administered immediately, and repeated every thirty to sixty minutes; afterwards, thrice daily for a few days.

Accessory Measures.—The patient must avoid mental excitement, stimulants, coffee, sleeping-draughts, indigestible food, etc. Pure air; cold water, used internally and externally; regular, moderate exercise in the open air, short of inducing fatigue; a contented and tranquil disposition, with light and nourishing diet, are excellent auxiliaries. In all heart affections mutton broth is better than tea.

138.—Intermittent Pulse.

Definition.—An absolute loss of the normal beats of the pulse, covering the time of a natural stroke, or in extreme instances, of two, three, or even more pulsations; probably from temporary failure of the left ventricle of the heart.

The pulsation following the intermission is heavier and

fuller, showing that the ventricle is contracting on an extra volume of blood after the momentary pause, like a smith who, striking at the forge a number of strokes in regular succession, until tired of the action, changes it for a moment to give a deliberate blow, and then rings on again in regular time.

Cause.—It is not supposed to be due to Indigestion, or to any affection of the lungs, liver, kidneys, or other secreting or excreting organ, but to *deficient nervous force*. "I have never met with a case in which it has not been traceable to some form of cerebral excitement, with succeeding depression. Grief from the death of friends; shock from failures of business; disappointments; violent outbursts of passion; remorse, degradation; and (most fruitful cause of all in this madly striving age) over-work of brain—these are the outside influences leading to the changes on which the phenomenon of intermittency of the pulse most frequently depends" (*Dr. B. W. Richardson*). It may be due to excessive cold.

Treatment.—We fully concur in Dr. Richardson's recommendation of change, sufficient rest and sleep, and the avoidance of excitement and stimulants; but our *Materia Medica* supplies us with remedies—such as *Dig.*, *Phos.*, *Nux. V.*, *Ac.-Phos.*, *Acon.*, *Bell.*, *Spig.*—which are greatly superior to his depletive measures, purgatives, and opiates.

139. Aneurism (*Aneurysma*).

Definition.—A tumour formed by the dilatation of an artery, or communicating with an artery, and containing blood. In its first stage, the tumour contains fluid blood, and pulsates; in its second stage, it contains coagulated blood, deposited in numerous thin layers, which resemble the leaves of a book.

Aneurism may be *idiopathic*, or *traumatic*: the latter is caused by an injury to the artery. The disease is more common in men than women, and causes several hundred deaths in England annually.

Varieties.—The *fusiforum* (spindle-shaped), sometimes

called *true* Aneurism, consists of an unnatural dilatation of an artery; *sacculated* Aneurism is a partial dilatation of all the *coats* of an artery; and *diffused*, implies an escape of blood from a ruptured artery into the surrounding tissues. The last variety may be accompanied with all the symptoms of shock, and in chronic cases has been mistaken for a purulent sac, and opened accordingly, to the imminent peril of the patient.

Causes.—The *exciting* cause is almost invariably mechanical: a wound, blow, strain, violent muscular exertion, or other injury. Men suffer from Aneurisms far oftener than women, and they are commonly found in persons who make great physical exertions, and especially where there is any impediment to, or restraint upon, the action of the muscles. The *predisposing* causes are degenerations of the blood-vessels, especially those resulting from excessive doses of Mercury, Syphilis, Gout, Rheumatism, Phthisis, Atheroma, Cardiac hypertrophy, and Alcoholism. A cold climate always predisposes to Aneurism.

Diagnosis.—This is beset with difficulties, the most eminent surgeons being occasionally mistaken in their diagnosis. There is a lancinating, *intermittent* pain, with a continuous aching. The tumour is situated near the course of a large arterial trunk, and in recent cases has a distinct pulsation, which may be arrested by pressure of the artery on the cardiac side of the tumour, and increased by pressure below it. These points are generally sufficient to distinguish Aneurisms from other tumours.

Treatment.—

Aconite.—This gives *relief from pain*, and quiets the circulation.

Kali Hyd.—Suitable for patients weakened by *Syphilis*, or *Mercurialisation.*

Arnica.—This remedy may be alternated with *Acon.* in *traumatic* Aneurism.

Phosphorus.—Is useful in *idiopathic* cases to prevent further arterial degeneration.

Veratrum Viride.—In recent Aneurism, to control arterial excitement, and favour the deposit of fibrine. A dose of five

drops of the tincture every three hours, until the pulse is reduced to 50 or 60 beats per minute, is said to be remarkably beneficial.

Bell., *Dig.*, *Gels.*, and *Cimic.* are also recommended for the *acute* symptoms; and *Calc.-C.*, or *Calc.-Phos.*, *Lych.*, *Sulph.*, or *Natrum Sulph.*, for the *chronic* degenerative metamorphosis.

Surgical Treatment.—An Aneurism frequently requires one of the following surgical measures: the *ligature* of the artery, whereby the blood current is cut off from the tumour; *compression*, which favours the deposition of fibrine in the tumour, diminishing its capacity and increasing the thickness and strength of its walls; or *galvano-puncture*, by which the formation of a blood-clot is rapidly promoted. *Perfect rest*, also, favours the same object, and with medical aid will sometimes induce a cure in the most unfavourable cases.

The subcutaneous injection of *Secale*, in doses of from three to ten drops of the tincture or watery extract, has likewise effected cures. Dr. Tod Helmuth reports a case in which repeated injections of the watery extract, three drops each time, were followed by the most satisfactory results, the tumour being reduced one-half and the patient enabled to resume ordinary duties. Beyond a slight Erysipelas, which was easily controlled by homœopathic remedies, no untoward symptoms occurred.

Rest and Limited Diet.—In a previously written work, we recommended rest, a suitable posture, and a light, unstimulating diet, as favourable *adjuncts* to the treatment of Aneurism. Now, we prescribe them as primary and essential elements in the treatment, more especially of internal Aneurisms. These combined measures have occupied much attention in the profession, and given rise to important discussions. The favourable results following compression of Aneurisms of the limbs had established the truth that complete cessation of the flow of blood through the sac is not absolutely essential for a cure, so that encouragement was given in dealing with internal Aneurisms, to the adoption of any general treatment by which the force, quantity, and frequency of the blood-stream through the sac is diminished; and it is now probable that the recovery of many cases,

attributed to prolonged and interrupted compression, was mainly due to rest in a recumbent posture.

Mr. Joliffe Tufnell communicated to the Royal Medical and Chirurgical Society reports of two cases of Aneurism of the abdominal aorta cured in thirty-seven and twenty-one days respectively, and of one case of popliteal Aneurism cured in twelve days, by rest and restricted diet. Mr. Tufnell's views are, briefly, as follow:—To consolidate a circumscribed Aneurism of the abdominal or thoracic aorta the circulation must be modified by rest, regimen, and remedial agents; the health of the patient must be kept as good as possible; and, as the fibrine of the blood is the material agent of repair, the blood must be kept in a highly fibrinised state. The difficulty to contend against is the distensile action of the heart, the flow of blood from which has a tendency to thin and destroy the sac.

Diet.—The diet should be good, but not bulky, restricted to three meals a day, taken at regular intervals, and consist of two ounces of white bread-and-butter, with two ounces of cocoa, or milk, for breakfast; three ounces of broiled or boiled meat, three ounces of potatoes or bread, and four ounces of water or light claret, for dinner; and two ounces of bread-and-butter, and two ounces of milk, or tea, for supper; in all, ten ounces of solid, and eight ounces of fluid food, in the twenty-four hours. The object of this restriction in diet is to lessen the volume of blood and reduce the activity of the circulation, so as to favour the coagulation of fibrine within the sac.

Recumbency.—The beneficial effects of recumbency appear to be most remarkable. In one case, as stated by Mr. Tufnell, the pulsations were diminished thirty-five beats per minute, consequently there was a reduction of 50,400 aneurismal pulsations in the twenty-four hours. In another case, the aneurismal sac was distended 43,200 times less frequently in this posture; and, granting that the patient would be in bed twelve hours out of the twenty-four, there was clearly a reduction in the number of distensions of 21,600 per day (*Medical Times and Gazette*). The chief thing in securing these results is the *recumbent posture*, for, if this be

not uninterruptedly maintained for two months, or ten weeks, all other treatment will be neutralised. Recumbency is the secret of cure, placing the same check upon the circulation in internal, which is mechanically produced in external, Aneurism.

Mr. Tufnell's experience proves this treatment to have been successful in sixteen cases out of eighteen. There is most hope of recovery when the Aneurism is detected in its earlier stages, before injury of important neighbouring structures, or a rupture of the sac (in diffused Aneurisms little can be done beyond mitigating symptoms); and particularly when the heart is enlarged, and the aorta atheromatous, and, consequently, incapable of transmitting the blood with force. This condition, it is obvious, is favourable to the deposit of fibrine.

Mr. Holmes, in his Lectures at the College of Surgeons, pointed out the dangers attending *abdominal compression*, and, we think, has thereby done great service; for the brilliancy of success in a few cases might have caused these dangers to be overlooked, and a freer resort to compression than was justifiable might have been adopted.

As accessories to the above measures, we have various remedies that may be administered with the happiest results. The most important of these are—*Acon.*, *Ver.-Vir.*, *Arn.*, *Dig.*, and others, as before pointed out.

Change of Climate.—Lastly, when Aneurism has appeared near the surface, and a recurrence of the disease is apprehended in deeper and more vital parts, Dr. T. K. Chambers recommends a change to the climate of Italy, where degenerative disease is the exception, and acute disease the rule; the *opposite* conditions to those common in this country.

140.—Phlebitis (*Phlebitis*)—Inflammation of the Veins.

Definition.—Inflammation of the tissue of a vein, causing changes in its texture, and a local coagulation of blood, with a tendency to embolism.

Two varieties exist of this not very common disease :—

1. *Adhesive*, or chronic, generally arising from exposure to

wet and cold, and affecting one of the large veins of the lower extremities; it occurs most commonly in connection with Varicosis. It is more painful than dangerous.

2. *Suppurative*, which is a more serious form, frequently an aggravation of the adhesive variety, and sometimes caused by a wound or abscess. When associated with Pyæmia the symptoms are severe, and may soon lead to a fatal termination.

Phlegmasia dolens (Milk-leg or White-leg) is an inflammation of the veins, peculiar to nursing women, presenting symptoms, and requiring treatment, similar to Phlebitis.

Symptoms.—If the affected vein is near the surface, it appears reddish-purple; it is hard, swollen, and knobbed; severe pains may dart through the limb, especially in movement, and there is stiffness, with more or less œdema of the part. In acute Phlebitis, repeated rigors occur, with depression of spirits; anxious countenance; rapid weak pulse; dry, brown, or blackish tongue; cadaverous skin; great prostration; muttering delirium, and vomiting of bile. There may also be excessive pain in the joints, followed by a copious secretion of pus, and even a purulent formation in the lungs, liver, and other parts of the system, from Pyæmia.

Epitome of Treatment.—

1. *Acute Phlebitis.*—Acon., Bell., Ham., Puls., Lach.

2. *With Typhoid symptoms.*—Ars., Hyos., Ac.-Mur., Carbo Veg.

3. *Secretion of Pus.*—Sil., Hep.-S., Merc.-S., Sulph.

4. *Chronic.*—Bell., Phos., Ham., Puls., Arn., Lyc., Cham., Nux V., Spig., or Zinc.

Leading Indications.—

Pulsatilla.—If the fever-symptoms are not severe, or when they have been moderated by *Acon.*, or *Bell.*, *Puls.* will exert the most favourable action upon the veins. It is particularly suited to females liable to *menstrual irregularities*, Leucorrhœa, and other discharges.

Aconitum.—Hot, dry skin; full, bounding pulse; rigors; dry furred tongue; great thirst.

Belladonna.—Congestion of head and face, *throbbing headache*, red face, brilliant staring eyes, dilatation of pupils. In

chronic cases, *Bell.* is indicated by intense dark redness of the parts involved.

Hyoscyamus.—Low muttering delirium, starting, and picking with the hands, which are in almost constant motion.

Arsenicum.—Extreme prostration, dry, brown, and cracked tongue, burning thirst, hot dry skin.

Carbo Veg.—Venous congestion, with a blue tinge of skin over the whole body, fearful anguish about the heart, and icy-coldness of the surface.

Silicea.—Threatened or actual suppuration.

Hamamelis (general unhealthy state of the veins). *Hep.-Sulph.* (fœtid discharge from abscesses, and purulent infiltration). *Merc.-Sol.* (thick, flaky pus, or thin sanious discharge). *Lyc.* (purulent formation in the lungs, with expectoration of pus). *Nux V.* (when caused by high living, or with Piles and Constipation).

Accessory Measures.—*Rest;* hot-water fomentations; *Aconite lotion*, if there be much pain; *Hamamelis lotion* (see next Section), if the veins are varicose. In acute cases the diet should be light and limited; but when suppuration ensues the system must be supported by the most generous diet.

141.—Varicose Veins (*Varices*).

Definition.—A condition in which the veins are dilated so that their valves, which cannot undergo a corresponding enlargement, cease to be efficient.

The disease occurs most frequently in the superficial veins of the lower extremities, and not usually in the deep-seated ones, because they are supported by the muscles and fasciæ. When the veins of the spermatic cord are involved, the disease is called *Varicocele;* when those of the anus, it constitutes a form of *Piles.*

Symptoms.—The affected veins are dilated, tortuous, knotted, and divided into separate pouches, of a dull leaden or purplish colour, with much discoloration of the parts, considerable swelling, and some œdema of the limb. If a great many small cutaneous veins are alone affected, they present the appear-

ance of a close network. The enlarged veins and local swelling diminish after taking the horizontal posture.

Causes.—Generally, conditions which induce more or less permanent distention of the veins. Strains, or over-exertion of a part, may cause an afflux of blood into them and lead to their distention; standing occupations favour the gravitation of blood to the lower extremities; and, further, the length of a vein, such as the *internal saphena*, may lead to its undue distention in consequence of the long column of blood it contains. Obstacles to the return of venous blood, such as tight garters or stays, a tumour, the pregnant uterus, or even impacted fæces, by pressing upon one of the large venous trunks, may occasion its permanent distention as well as that of its branches. In other instances, varices seem to be due to an hereditary predisposition, altered condition of the blood, or deficiency of tone in the active organs of circulation, leading to an enfeebled and relaxed condition of the walls of the veins.

Consequences.—1. Coldness of the feet, from obstructed circulation. 2. Severe aching pain, with a sense of weight and fatigue, especially after long walking, or remaining for some time standing in one posture. 3. The vein may burst by injury, and occasion severe and dangerous hæmorrhage. 4. Ulcers may arise from the imperfect circulation, the obstruction of absorbents, and the defective nutrition of the skin, usually on the lower part of the outside of the leg. 5. They incapacitate for hard or long-continued work, being associated with constitutional debility.

Epitome of Treatment.—

1. *Simple varices.*—Ham., Puls., Sil., Ac.-Fluor., Agar.

2. *Associated with other disorders.*—Nux V. and Sulph., in alternation (*Constipation, Piles, etc.*); Ars. (*debility, burning pains, livid colour of veins, varicose Ulcers of the legs, etc.*; Ac.-Nit. (*weakly, scrofulous patients*); Acon. or Bell. (*painful inflammatory symptoms*); Puls. (*excessive pain, swelling and lividity*); Arn. (*when the patient cannot have proper rest*).

Hamamelis Virg., administered internally, and applied as a lotion externally—a compress covered with oiled silk, and a well-applied bandage—is often specific. *Lotion.*—One part of the strong tincture to six parts of water.

Dr. Burnett recommends also:—*Ferr. Phos.*, *Kali Chlor.*, *Aloes*, *Opi.*, *Æsculus H.*, *Nat. Sulph.*, *Hyd.*, *Rhus.*, *Bellis Per.*, *Phos. Ac.*, *Osmium*, *Aur.*

Surgical Means.—Dr. Tod Helmuth has resorted to the destruction of the diseased veins by the application of an escharotic paste compounded of equal parts of caustic potash and caustic lime, made into a paste with alcohol. This should be washed off in two or three minutes with vinegar and water, and the eschar allowed to separate. Hæmorrhage which may follow the separation of the slough, is easily controlled by pressure, or styptic applications. This method, Dr. Helmuth states, has produced very satisfactory results. Other methods of obliteration have been practised, but should only be undertaken when the varicosis is limited and the patient is otherwise in fair health.

Accessory Means.—*Rest*, with the leg in a horizontal posture, to favour the return of the blood towards the heart, and relieve the distended veins of the column of blood, is a valuable accessory to medical treatment. Moderate compression by accurately-fitting bandages or laced-stockings, so as to afford that support to the blood which the valves can no longer give, and to prevent increased distention. The pressure should be very gentle and uniform, and be applied in the morning, before the patient puts his feet to the floor, and maintained until he retires to bed. Should only a small portion of a vein be enlarged, a piece of strapping-plaster may afford the requisite support. Prolonged exercise or standing should be abstained from, and, after taking moderate exercise, the limb should be raised, and maintained in a horizontal posture. Standing is more unfavourable than walking. The leg should be well washed, and rubbed quite dry, every morning.

Varicose Ulcers.—Their treatment is the same as that of Ulcers generally, with the exception of the following directions: Should a varix burst, excessive hæmorrhage may suddenly take place, inducing fainting, or even death. The patient should be immediately placed flat on the floor, and the leg raised, when the hæmorrhage generally ceases. A compress and bandage should then be applied to prevent subsequent bleeding. Excoriations or tender spots about

varicose veins should have early attention, to obviate the formation of Ulcers. See Section on "Ulcers."

142.—Goitre (*Bronchocele*)—Derbyshire Neck.

Definition.—Enlargement of the thyroid gland, endemic in certain mountainous districts, but not limited to them.

The swelling is unattended with pain or danger, until it acquires a size sufficient to produce deformity, and, by its pressure upon the trachea and œsophagus, interferes with respiration and swallowing. Women are more subject to it than men, the proportion being about twelve to one, and the right lobe is more often enlarged than the left. It is most commonly met with in chalky districts and mountainous countries, and in the latter is often associated with Cretinism.*

Causes.—The habitual use of water which percolates through magnesian limestone rocks or strata, and which holds in suspension the soluble salts of lime.

In some parts of England—Yorkshire, Derbyshire, Nottinghamshire, Hants, and Sussex—where the disease prevails, there is a ridge of magnesian limestone running from north to south through the centre of the district. All along that line Goître prevails to its greatest extent; and, diverging to either side, the disease is found to diminish (*Inglis*). In a goîtrous district in Switzerland there are some waters issuing from certain rocks, and trickling along crevices in the mountains, the drinking of which will produce *Goître*, or increase goîtrous

* "Cretinism is a strange disease, a sort of Idiocy, accompanied by deformity of the bodily organs, which has a close but ill-understood connection with Goître: most cretins are goîtrous; but the latter may exist without the former. The cretin is found principally in the valleys of the Alps, the Pyrenees, and the Himalaya mountains. Idiotism of the lowest grade is often his lot; sometimes he is deaf and dumb, or blind; and, in short, if neglected, he more resembles an animal than a human being. I say, if neglected, for the humane Dr. Guggenbuhl has proved, that by pure mountain air, exercise, a nourishing diet into which milk largely enters, and moral and mental training, much may be done for these apparently hopelessly-wretched beings" (*Tanner*). Alas; the Doctor has died, and the children are dispersed to their homes.

swellings, in eight or ten days, while the inhabitants who avoid these waters are free from the disease.*

Goître is generally enlarged during any derangement of the health, especially uterine; or by difficult labours, strains, twists of the neck, etc.

Treatment.—*Spongia.*—This remedy is recommended by Hahnemann for goîtrous persons living in valleys; it is also suitable for children, and girls approaching puberty, who do not require *Iod.*

Iodium.—Inveterate, hard Goître, affecting dark patients, and when there is an absence of other symptoms.

Mercurius Iod.—In cases of long standing, and when the tumour is enlarging in spite of the previous remedies, we have used *Merc.-Iod.* with excellent results.

Calcarea.—Goître associated with Struma.

K.-Hydriod, Brom., Nat.-Carb., Phos., Apis, Fluor.-Ac., and *Sulph.* have also been recommended.

The external application of the drug given internally we have found greatly to facilitate the cure.

An entire removal of the swelling is not always possible; still, much is gained if the tumour is lessened, or its further enlargement prevented. Any impairment of the digestive or uterine functions should be corrected, for with such disorders a Bronchocele often attains inconvenient and even alarming proportions.

Auxiliary Measures.—The most essential point in the treatment is the *removal of the patient from the district in which the affection occurs.* The necessity for this may be inferred from the fact that persons taking up their residence in affected localities soon acquire Goître, while others affected with Goître soon lose it on leaving such localities. A dwelling on the coast and sea-bathing are advantageous, and then the remedies may be administered with greater hope of success. Water for domestic purposes should be boiled or distilled.

* The opinion that impure drinking-water is the cause of Goître is as old as Hippocrates and Aristotle, and has been held by the majority of physicians. The opinion may be said actually to have been put to the test of experiment, since, both in France and Italy, the drinking of certain waters has been resorted to, and apparently with success, for the purpose of producing Goître, and thereby gaining exemption from military conscription.

Next to removal from a goîtrous locality, this is the most essential point in the treatment.

142.—Exophthalmic Bronchocele (*Bronchocele Exophthalmica*).

DEFINITION. —"An enlargement, with vascular turgescence, of the thyroid gland, accompanied by protrusion of the eyeballs, Anæmia, and palpitation."

CAUSE.—*Nervous exhaustion.* This may be induced in females by Leucorrhœa, Menorrhagia, etc., or by Hæmorrhoids in males.

SYMPTOMS.—Pinched appearance of the face; depression of the alæ nasi; coarseness of features; brown, dull, muddy, unwashed appearance of the skin; aspect of great distress; great nervousness; often hysteria; wild expression; protrusion of eyeballs; swelling of eyelids; profuse lachrymation; feeling of sand in the eyes; voracious appetite; constipation; albuminuria; flushings of heat; rapidity of pulse; violent palpitation; perspiration; prostration.

TREATMENT.—This is simple, depending much on hygienic means, which may be assisted by such remedies as China (*loss of animal fluids*), Ferrum (*Anæmia*), Bell. (*heart symptoms*), Puls. or Nux. V. (*gastric irritability*). Nat.-Mur. (*in ill-nourished subjects, constipation, earthy complexion*); Glow. (*during attacks of palpitation*).

The "Accessory Means" suggested for "Anæmia" (Sec. 82) are equally necessary here.

CHAPTER VIII.

DISEASES OF THE RESPIRATORY SYSTEM.

143.—Hay-Asthma (*Asthma ex fœnisicio*) Hay-Fever—Summer Catarrh.

DEFINITION.—A specific disease, affecting predisposed persons only, and affecting them in the same way, and at about the same period yearly, or nearly so, and caused by the

emanations from certain flowering plants, including the grasses.

The term *Hay-fever* is not sufficiently inclusive, for the odours from hay, although sufficient in many cases, less frequently produce the affection than do the various flowering plants. Dr. Waters, who was a severe sufferer from the affection, thought that it partook somewhat of the nature of Ague, certain emanations and atmospheric conditions depressing the nervous system.

Symptoms.—Those of an ordinary Catarrh, to which the symptoms of *Asthma* are superadded. There are—itching of the forehead, nose, eyes, and ears; much general irritability and lassitude; sneezing; profuse discharge from the nose; tightness of the chest, dyspnœa, and Cough; pricking sensations in the throat, general depression, etc. Exposure to the emanations from powdered *Ipecacuanha* give rise to similar symptoms in many persons.

Epitome of Treatment.—

1. *When the chest is chiefly affected.*—Ipec., Ac.-Hydrocy., K.-Bich., Ac.-Carbol.

2. *The nose, eyes, and throat.*—Ars. (*much debility, with acrid discharge*); Euphr. (*profuse lachrymation*); K.-Hydriod, Sabadilla.

3. *Prophylactics.*—Ars., Iod., K.-Bich.

Sabadilla.—The late Dr. Bayes recommended one drop two or three times a day in water, and the administration of the drug by olfaction, several times daily; and he adds, "By this means I have cured many severe cases, and made numerous converts to our system." Dr. C. L. Tucker says for some years it has been his practice to give this remedy in certain cases of *Hay Fever*, and great relief often follows its use.

Nat.-Mur.—Dr. Holland has found a teaspoonful of salt in a tumbler of water, sniffed up the nostrils three or four times a day, very successful as a remedy.

*Carbolic Acid.**—Short, dry cough, difficult breathing; watery eyes; profuse discharge from nose; inability to lie down.

Liq. Potassæ Arsenitis is recommended as a *specific*. We have obtained excellent results in many cases from *Ipec.*,

* See *H. World*, vol. xxi. p. 547.

Euphr., *Merc.*, and *Ars.* In several, the disease has not recurred in subsequent years.

Inhalation.—The remedy used internally should also be administered by inhalation (see Sec. 37), either by simple olfaction, or, which is still better, in the form of vapour; this latter is produced by means of an ordinary spray-producer. Inhalation should always be employed during an attack.

Accessory Means.—Removal to the coast, with a barren surrounding country, or to any part where flowering plants and grass do not grow, or hay is not stored, offers the surest protection. The symptoms are mitigated by protection from bright sunlight, and by such means as tend to promote the general circulation. Cold or tepid bathing, the cold shower-bath, and the Turkish bath are also recommended under different conditions. In one reported case, the symptoms were almost magically removed by two or three minutes' swim in the sea.

144.—Croup (*Angina Trachealis*)—Inflammatory Croup.

Definition.—A specific inflammation of the mucous membrane of the *larnyx* and *trachea*, which leads to the secretion of tenacious lymph, and considerable swelling from effusion into the sub-mucous areolar tissue.

Symptoms.—The disease usually begins as a catarrh, the first indications being fever, *hoarseness* (a symptom which always indicates the implication of the larnyx and the neighbourhood of the vocal cords) in the voice or cry of the patient, with a peculiar barking cry. This truly characteristic cough indicates a narrowing of the *rima glottidis;* and often exists two or three days before its nature has been marked enough to alarm the mother. To trained ears, however, it intimates danger from the first, and if the child be asked to draw a deep breath, the stridulous sound completes the diagnosis.

After one or two days, or even without any premonitory indisposition, the symptoms become aggravated, *usually at night*, the sleep being interrupted by paroxysms of *hoarse* coughing, the child throwing its head back to put the windpipe on the stretch to facilitate the ingress of air. This is because the

dyspnœa is *inspiratory;* the chest being empty and contracted. A metallic ringing sound is heard in the inspiration and in the cough, which has been compared to the crowing of a young cock, or the barking of a puppy; and although the respiratory efforts are great, it is evident, from the turgescence of the face and neck, that an insufficient quantity of air enters the lungs. After the fit has continued for a time, from a few minutes to an hour or more, there is an interval of relief usually of several hours' duration. The pulse is frequent and wiry; and there is loss of appetite, thirst, and great distress.

Diagnosis.—The fever and other *acute* symptoms at once distinguish the ailment from chronic laryngeal diseases of a warty, tubercular, or other nature. *Cough* is the primary symptom of Croup, but *sore throat* of Diphtheria, which is further distinguished by the false-membrane on the throat, uvula, or tonsils. *Abscess of the larynx* may simulate Croup, but is easily distinguishable by the following symptoms: an Abscess forms slowly; the accompanying cough is low, and not brassy; and the child constantly holds his neck straight and stiff.

Differences between Croup and Diphtheria.

CROUP.	DIPHTHERIA.
1. There is a *premonitory hoarse, metallic cough*, without premonitory illness.	1. There is a *premonitory illness*—shivering and fever, with sore throat—without premonitory cough.
2. Croup is only dangerous in consequence of its *locality*.	2. Diphtheria is *dangerous per se*, and the production of a false membrane is but one of its phases.
3. This disease is sometimes preceded by catarrhal symptoms which *extend upwards* from the chest to the larnyx.	3. The throat affection tends to *pass downwards* to the respiratory tract.
4. Croup being a local disease, the treatment consists mainly in *subduing the local symptoms.*	4. Diphtheria being a blood poison, and causing great general depression, the treatment must be directed to *combating the systemic mischief.*

Danger.—An attack may prove fatal in two to four days, from exhaustion, suffocation, convulsions, or the formation of a coagulum in the heart. If the local symptoms are very

severe, and the paroxysms recur frequently, the prognosis is unfavourable. The tendency to death is by *Apnœa*, the œdema contracting the naturally narrow passage at this part.

When a case is about to prove fatal, the breathing becomes so greatly impeded that the lips and cheeks become livid, cold, and covered with clammy sweats; the eyes red and sunken; the entire organism prostrated; and, unless speedily relieved, the child expires in a state of suffocation; or coma and convulsions ensue, and end the struggle. If the child should recover, the occurrence of one attack will predispose him to others.

Causes.—The *predisposing* cause of Croup may undoubtedly be explained by the anatomical fact that the trachea is very small in infants, and does not enlarge in the same proportion as other parts of the body till after the third year; after this period, the calibre of the trachea enlarges rapidly, and the liability to Croup diminishes accordingly. Some families have a decided predisposition to this disease.

The *exciting* causes are—cold; dark, damp, and unhealthy localities; sudden changes of temperature; wet feet; poor or scanty food, especially the adoption of improper diet when a child is weaned; insufficient clothing, or previous illness.

Like most diseases of the respiratory organs, Croup is most fatal and most frequent in winter and spring. *Low* and *moist* districts are its most favourite localities. Towns situated near the banks of rivers have an extra share of it; and it has been noticed to prevail in such places, especially among the children of washerwomen, clearly showing the relationship of cause and effect. Dr. Alison observed it often occasioned by children's sitting or sleeping in a room *newly washed*, and noticed its frequent occurrence on a Saturday night—the only day in the week it was customary for the lower classes in Edinburgh to wash their houses.

Epitome of Treatment.—

1. *Early Symptoms.*—Acon., *alt.* Spong.

2. *Developed Croup.*—Brom., K.-Bich., Iod., Spong. Ant.-T., Hep.-S., K.-Brom.

3. *Sequelæ—Hoarseness, Cough, etc.*—Hep.-S., Phos., Carbo Veg., or Sulph.

4. *Predisposition.*—Sang., Hep.-S., Calc.-C.

Leading Indications.—

Aconitum.—*Febrile* symptoms; *spasm* of the larynx causing *dyspnœa;* cough following *expiration.* Even when another medicine is indicated, it is often desirable to administer *Acon.* in alternation, to relax the spasm which often complicates the disease.

Hepar Sulph.—Rapid secretion of mucus in the throat, threatening suffocation.

Kali Bich.—If the mucus be tough and stringy, this remedy will be more appropriate than *Hepar S.* Also in asthenic forms, when *Bromine* fails to relieve.

Spongia or *Iodine.*—One of these may be chosen if there be a hard, barking, or whistling cough, night and day, and the breathing is very laboured. *Iod.* should have the preference in scrofulous patients, and be administered by inhalation also.

Bromine.—Asthenic Croup with extreme congestion and swelling of the air passages, so that the child breathes with great difficulty, throws his head back, grasps at the throat, and evinces anxiety. Affection of upper part of the air tubes; dry croupy cough, like that of a sheep, grating and tickling. A low dilution (1x) should be administered, alternately with *Acon.*, if the skin is hot and dry, every half-hour or hour till improvement ensues.

Hepar Sulphur.—Loose cough, with a ringing or brassy sound, and constant rattling in the respiratory organs, during which the patient tries in vain to get relief by expectoration. This remedy is efficacious for *abscess of the larynx.* Also useful for Sequelæ, for which Dr. Nichol of Montreal further recommends *Sanguinaria.*

Sanguinaria.—Catarrhal form; prevents the extension, recurrence, and predisposition to Croup.

Ant.-Tart.—Loose, rattling cough; difficult expectoration; cold, bluish face; cold perspiration; loss of strength.

Phosphorus or *Arsenicum* may be required if debility be very great and the disease take on a typhoid character. If necessary, one of these remedies may be alternated with another having more affinity to the local lesion.

The following remedies are also suggested by another

authority:—*Mosch.* by inhalation; *Cup. Met.* (pure spasm without cough, hoarseness, or signs of catarrh); *Bell.* (children of convulsive tendency); *Agar.* (nervous, jerky children, with tendency to chorea); *Ign.* (when brought on by fright).

Administration.—In very severe cases, every fifteen or thirty minutes; in less severe, or during improvement, every two, four, or eight hours.

Accessory Measures.—During the treatment, everything should be avoided that would be likely to excite or irritate the patient. A partial or complete *warm bath*; sponges or cloths squeezed out of *hot* water and applied to the throat, and a compress or flannel bandage habitually worn; the feet and general surface of the body should be kept warm, and the air of the apartment raised to about 65° Fahr., and this temperature uniformly maintained by day and night; watery vapour should be thoroughly diffused therein by keeping a kettle of water constantly boiling on the fire, or over the flame of a spirit-lamp, and fixing a tin tube to the spout to convey the vapour near to the patient. In very severe cases, a tent should be formed over the patient's bed, and steam conducted under it by a tube from boiling water, to which a few drops of *Iodine*, *Bromine*, or *Kali Bich.* have been added. This method of administering medicines by inhalation is a most valuable one in Croup, a disease essentially local and within easy reach of volatile agents.

During cold weather, or in very susceptible patients, it is sometimes desirable to keep the child in a large apartment, the air of which is made artificially warm and moist, for ten or fourteen days.

Tracheotomy.—The judgment of the medical attendant only can decide when the danger of suffocation is such as to render this operation necessary.

Diet and Regimen.—During the attack, water is almost the only article admissible, and may be given in small quantities. During recovery, broth, beef-tea, cocoa, milk-and-water, arrow-root, gruel, and demulcent drinks. In the case of delicate children, or if great weakness suddenly occur during the course of the disease, it may be necessary to support the patient by

essence-of-beef and wine-and-water, which should be administered in small quantities, at regular and frequent intervals. In the case of an infant at the breast, the mother should adopt the dietetic suggestions contained in the Section on "Dyspepsia."

Prophylactics.—It may be remarked that when cold and cough are noticed in a young child, with *hoarseness and loss of voice*, he should be sedulously watched, and guarded against cold and *damp*, and have a carefully-selected, light diet. If any feverish symptoms exist, *Acon.* should be administered; in the absence of fever, *Hep.-S.*

145.—Coryza (*Gravedo*)—Catarrh (*Catarrhus*)—Cold in the Head, and Bronchial Catarrh (*Catarrhus bronchiorum*).

The condition expressed under the above different terms is of very common occurrence, and often the precursor of very serious affections. It consists of Inflammation of the mucous membrane of some portion of the air-passages. If the mucous membrane of the nose is affected, it is called *Coryza*; if the *trachea*, and large bronchial tubes, *Bronchial Catarrh.*

Symptoms.—Coryza usually commences with lassitude, slight shiverings, creeping in the back, "goose skin," weight in the head, tightness across the forehead, sneezing, watery eyes, and obstruction of one, or both nostrils, with a discharge of thin, colourless fluid. If it be a severe cold, the foregoing symptoms are soon followed by a dry Cough, Hoarseness, Sore throat, dryness, tenderness, and swelling of the nostrils, thick mucous discharge, pains and soreness of the joints, limbs, and loins, general weakness, more or less fever, quick pulse, thirst, loss of appetite, malaise, etc. Under a vigorous condition of the constitution, or as the result of judicious treatment, the symptoms soon subside. In other cases, the complaint may assume the form of Bronchitis, Pneumonia, Pleurisy, Asthma, Croup, Quinsy, Erysipelas, Toothache, Neuralgia, Rheumatism, or even excite Consumption in a predisposed person.

Proximate Causes.—Whatever abstracts heat, lowers the temperature of the body and causes cold.

Wet Clothes act thus. When they are dry, they are only imperfect conductors of heat, and thus retain what has been produced by natural processes. But when they are wet, the moisture is evaporated both by the external air and by the radiating body-heat, and the consequence is that the latter is given off and lost to the body, which thus becomes "chilled." If, however, the heat thus abstracted is renewed by the exercise of the body, no "chill" takes place, no "cold" is "taken;" the general equilibrium of temperature is maintained. So long, then, as the wearer of wet clothes maintains vigorous exercise there is no harm; but if he continue to wear them after the exercise ceases, he is in danger. It matters not that he is used to exposure, that he has been hardened to the weather; his body loses heat, and must suffer in consequence. Clothes, damp with excessive perspiration, carry off bodily heat, sitting on a damp seat, or on the damp, cold ground, is in like manner attended with danger. The absorption of heat by the evaporation of moisture on the seat or ground, or to establish an equilibrium of temperature between the ground and the body, is more than the body can bear, unless there be excessive production to counterbalance the absorption.

Cold Draughts operate in a similar manner. The current of air cools the surface of the body, and as the person who is subject to it is usually sitting or lying down, and therefore not maintaining the equilibrium of heat by increased production, the temperature of the body is lowered, and "cold" is "taken." Exposure to a draught under the trees, or at an open window or door, is most refreshing, but it is most dangerous; and if the exposure be continued, cold and fever must inevitably follow.

Damp Beds.—The abstraction of heat is not less perilous by damp bedding than by damp clothes, though it is more insidious. Indeed, the unsuspecting sleeper is not only at the disadvantage that he is unable by exercise to supply the deficiency occasioned by evaporation, but he is also parting with his heat at a time when the general functions are in a comparatively dormant state.

Prolonged Bathing.—The check given to the radiation and exhalation of heat by a plunge into cold water is at once

followed by a reaction which is salutary. A person who possesses a sound heart and good circulation can maintain this reaction for a considerable time, and keep up the equilibrium of temperature. A feeble person cannot do this. But in the case of the strong, bathing should only be continued so long as there is a reactionary glow. As soon as this ceases and a sensation of cold is felt, the water should be immediately quitted, and friction, a run on the bank or shore, or brisk exercise after dressing should be resorted to. Prolonged bathing would only "give cold."

Hot Rooms.—The heated air in places of assembly relaxes the cutaneous vessels, promotes perspiration, and thus renders the body more susceptible to cold on passing into the cooler outer air. The susceptibility is increased if the person has been dancing. Passing from the hot room along cool corridors or passages to the outer air (where there is generally considerable draught), or directly into the outer air, is attended with risk of "catching cold," unless the mouth be closed, and the body well protected by extra clothing. Many a person has "caught a severe cold" while "waiting for the carriage" or while "walking home" in thin boots and slight upper clothing.

Insufficient Clothing.—In this variable climate, the necks, arms, abdomen, and legs of children are sadly too much exposed to cold; and they "catch cold" in consequence. "Evening dress" is usually lighter than the dress worn during the day, and does not afford sufficient protection to the wearer against the cool air to which he is so often exposed. "Cold" is also "caught" by persons who take a nap on the sofa, or in the arm-chair, or who go to bed at night without sufficient clothing. Many persons, too, are not careful enough in autumn to protect themselves against the increasing chilliness of the evenings, or against the diminishing temperature which rules during the day as the year declines.

Predisposing Causes.—The general causes of "colds" to which we have referred are more banefully and speedily operative in the cases of persons whose physical condition renders them specially susceptible. *Debility*, wherever it exists, is a predisponent. The very young, the very old, the anæmic, the

cachetic, the convalescent, the licentious, are all more likely to "catch cold" than others. Whenever, and from whatever cause, the tone of the constitution is low, there is greater liability to this common disorder. It is a prevalent notion, that the taking of spirits is a preventive of "cold;" so it is, if the stimulus given to the functions be maintained by other means; but it is a very unreliable preventive; for, as soon as the stimulating operation ceases, there is a reaction; the cutaneous vessels are expanded, heat is lost, the balance is disturbed, and unless it be restored by food, or exercise, or by additional clothing, the body is "chilled." The puddlers and other workers in iron-foundries find that they can work better and suffer less from "cold" and its consequences, if they dispense with alcohol. The arctic voyager finds that he can withstand the rigours of the climate better without his grog than with it. The drunkard dies of cold, while the abstainer lives.

Treatment.—*Camphor.*—This remedy is suited to the *chill*, or cold stage, when its prompt administration, in two-drop doses, repeated several times, every ten or twenty minutes, will often terminate the disease in the first stage. It should be chosen in preference to *Acon.*, when the patient has still to be exposed to atmospheric changes. It is of little or no use except in the *incipient* stage.

Aconitum.—Commencement of a Cold, or in the precursory stages of diseases resulting from a Cold, with *feverishness*. If properly administered, it often obviates the necessity for any other medicine. A dose every second or third hour. If the cold have advanced into any other disease, *Acon.* may be alternated with, or substituted by, another remedy.

Bryonia.—For Bronchial Catarrh—"Cold on the chest"—with hard Cough, shaking the head, etc., and soreness of chest, *Bry.* is one of the best remedies, with or without *Acon.*

Gelseminum.—Incipient, confirmed, and declining Catarrh, with watery discharge from the nose, soreness in the throat and chest, Cough, and Hoarseness; early stage of acute Bronchitis, without the excitement calling for *Aconite;* Catarrhal Ophthalmia.

Arsenicum.—Abundant discharge of *thin, hot, excoriating*

mucus from the nostrils, with *burning sensations;* flow of tears; affection of eyes, nose, larynx, and trachea; lassitude and *prostration.*

Pulsatilla.—Impaired taste and smell; thick fœtid discharge from the nose; heaviness and confusion in the head; aggravation of the symptoms in the evening or in a warm room; sharp pains in the ears and the sides of the head, frequently changing from one place to another.

Mercurius.—Constant *sneezing,* with soreness of the nose; thick mucous discharge; alternate heat and shivering; *profuse perspiration; Sore throat; conjunctival* inflammation; aggravation of the symptoms towards evening. It is often useful in alternation with *Nux V.* When there is dull headache on waking in the morning, and great accumulation of mucus in the posterior nares, *Merc.-Iod.* is a suitable preparation. If *Merc.* fail, *Hep.-S.* may be substituted.

Euphrasia.—Acrid fluent Coryza, with involvement of the lining membrane of the eyes, and *profuse lachrymation.*

Kali Bichromicum.—Chronic Catarrh, and chronic affections of the respiratory mucous membranes generally, with Hoarseness, *tough, stringy sputa,* chronically inflamed or ulcerated throat, Cough, etc. An additional indication is a concurrent affection of the digestive mucous membrane—yellow-coated tongue, etc.

Bapt. (*with feverish Cough*); Nux. V. ("*stuffy*" *Cold*); Ipec. or Cact. (*rattling of mucus*); Ant.-T. (*difficult expectoration*); Cimic. (*chronic*); Rumex Crispus (*sensitiveness to cold air*); Caust. (*cough attended with involuntary emissions of urine*); Cham. (*infants and young children*); Carb.-Veg. (*standing catarrhs of old persons*); Bell., Spong., Hep.-S., Phos. (*involvement of larnyx or trachea*); Dulc. (often *preventive* or curative of Cold from damp).

Nat.-Mur.—Dr. Holland, of Bath, informs us that he has found a useful remedy in a tea-spoonful of salt to a tumbler of water sniffed up the nostrils three or four times a day.

Accessory Means.—The *hot foot-bath* (see Sec. 32) at bed-time, and warm gruel when in bed, or copious draughts of cold water during and after the bath, to induce perspiration. When the directions are promptly and efficiently carried out,

Cold may generally be arrested in its incipient stage. If the Catarrh be established, the most effectual measure to ensure a rapid recovery is to avoid exposure to atmospheric vicissitudes until the attack has passed away. In serious cases the patient should remain in bed for two or three days. As a rule, light food, and a very sparing use of meat, should be adopted at the commencement of a Cold. In the case of young infants, an abnormal secretion is sometimes so profuse as to interfere with breathing and suckling. They should then be fed with milk by means of a spoon, and simple cerate, cold cream, or tallow applied to the nostrils, to prevent the formation of hard crusts. In chronic cases, a solution of perfumed Carbolic Acid may be injected.

Dry Treatment.—This has been recommended for the invasion of the disorder to arrest its further progress, but is efficacious at no other stage. It simply consists in abstinence from fluids of all kinds, until inflammation and secretion have ceased. The object is to stop the supply of fluid to the mucous membrane. This treatment is not so distressing as might be supposed, and is effectual in forty-eight hours.

The Sulphurous Acid Spray has been remedial in many cases.

To Diminish Excessive Sensitiveness to Cold.—1st. *Free exposure to the open-air, daily.* Familiarity with the atmosphere has a wonderful influence in diminishing the sensitiveness of the skin, and enabling the body to resist the invasion of cold. 2nd.—*The morning cold bath.* Cold-sponging over the entire surface of the body, the plunge-bath, or the shower-bath, is an invaluable method of protecting the body against injury from exposure to changes of temperature. Taken regularly in the morning, the cold bath inures the surface of the body to a greater degree of cold than it will probably encounter during the day; at the same time it promotes a vigorous capillary circulation, which is essential to the harmonious and healthy working of the system. For hints on the use of the bath, see Sec. 32. 3rd.—*Breathing through the nostrils.* Infants should be taught to breathe through the nostrils, especially during sleep; for this effectual preventive of cold is a habit not easily acquired in after life.

For *Chilly Children*, liable to Colds, nothing is better than inunction every night with *Cod-liver oil*. They must sleep in flannel night-dresses; quick sponging and brisk rubbing in the morning will remove any unpleasant odour.

146.—Aphonia (*Aphonia*)—Loss of Voice—Hoarseness.

Nature and Causes.—Aphonia is a temporary or permanent paralysis of the muscles which approximate the vocal cords in the production of sounds, and is generally the result of an acute or sub-acute inflammatory condition of the mucous lining of the larynx and trachea, a frequent accompaniment of a common Cold. Hysteria or debility is a cause of simple Aphonia. Aphonia from the pressure of an Aneurism or glandular Tumour, is also accompanied by marked dyspnœa. It is rather a symptom than a disease *per se*.

Symptoms.—The voice is hoarse and husky, at times almost or entirely inaudible; there is tickling, dryness, or irritation, and perhaps soreness in the throat, with a short dry Cough.

Epitome of Treatment.—

1. *Simple hoarseness.*—Phyto. (*also complete or chronic loss of voice*); Hep.-S. (*wheezing*); Phos. (*Paralysis of the vocal cords*); Carbo Veg. (*chronic*).

2. *With Cold in the head or chest.*—Acon., Caust., Merc., Bry., Spong., Phos. Dulc.

3. *From over-exertion of the voice—clergymen, singers, etc.*—Phyto., Caust., Arn., Bary.-C., K.-Bich., Bell., Glon.

4. *Worn-out voice.*—Rest, Galvanism, or a magnetic pall to the throat.

In some cases the *Sulphurous Acid* spray may be effectually employed. The throat and neck should be often bathed with cold water, as a preventive. *Electricity* is of use in most cases; in emotional Aphonia, a shock to the larynx from a charged Leyden jar may be necessary.

Leading Indications and *Accessory Means* are pointed out in the preceding Section; also in that on "Sore Throat."

147. Bronchitis (*Bronchitis*).

a. Acute Bronchitis is acute Inflammation of the mucous membrane of the bronchi—the air-tubes of the lungs. It may effect either the large or the small bronchi; and the smaller the tubes in which the inflammation exists, the greater the danger. Bronchitis is most common in elderly persons and children. It is one of the most important diseases of early childhood, on account of its frequency, its liability to complication with Pneumonia, and the danger of suffocation which attends it. Out of a total of 57,939 deaths from Bronchitis in England in 1880, 26,722 occurred in children, of whom 15,790 were under one year old.

Symptoms.—At first there is fever, with headache, lassitude, anxiety, Hoarseness, Cough, heat and soreness of the chest, and other symptoms of a common Cold. The mucous secretion is at first arrested, but afterwards increased in quantity. There is a sense of tightness or constriction in the chest, especially of the upper front part; oppressed, hurried, anxious, laboured breathing, with wheezing, and dry or moist râles; severe Cough, which is at first dry, but is afterwards accompanied with viscid and frothy expectoration, sometimes streaked with blood; subsequently the sputa become thick, yellowish, and purulent, but (although frequently blood-streaked) never rusty-coloured as in Pneumonia. The pulse is frequent and often weak; the temperature of the body is always raised, in severe cases as high as 105°; there is throbbing in the forehead and aching in the eyes, aggravated on coughing; the tongue is foul; the urine scanty and high-coloured; with other febrile symptoms. The râles, which may be heard in all portions of the lungs, distinguish Bronchitis from Croup. In favourable cases, the disease begins to decline between the fourth and eighth days, when the breathing becomes easier, and the expectoration thicker, less frothy and stringy; and the complaint soon entirely disappears, or assumes the chronic form.

In cases about to terminate fatally, the skin becomes covered with *cold* perspiration; the cheeks and lips are pale and livid; the extremities cold; there is rattling and a sense

of suffocation; the breathing being nearly suspended by the morbid secretion which chokes up the bronchial tubes and their ramifications, and which the patient has no longer power to cough up; at length, extreme prostration and complete insensibility end in death. In children, convulsions towards the end of an attack generally indicate fatal collapse of the lung.

Morbid Anatomy.—On a *post-mortem* examination, we find the trachea, the bronchi, and their divisions and subdivisions, completely blocked up by a frothy, adhesive mucus, resembling that which had been expectorated during life.

b. Chronic Bronchitis is a somewhat different disease, very common in advanced life. In mild cases there is only habitual Cough, shortness of breath, and copious expectoration, and no Pyrexia. Many cases of winter cough in old persons are examples of chronic Bronchitis. It is often insidious in its approach, although it sometimes succeeds acute Bronchitis, when that disease has been neglected or badly treated.

Causes.—Similar to those of common Cold:—exposure to cold draughts of air, to keen and cutting winds, sudden changes of temperature, scanty clothing, or undue exposure of the throat and neck after public speaking and singing. There are certain "social indiscretions" which are fertile causes. Among these are the habits of our business-men, who, after a hurried breakfast, hasten to catch the train or 'bus to the city, where they work all day on little or no food, and start on the homeward journey in the evening with the vital powers depressed, and in a condition most favourable to the inroad of disease. Ladies are also "indiscreet" in exposing themselves to draughts of cold air, in the thinnest and scantiest clothing, in halls or passages, or even in the open street on the way between their carriage and a crowded room. Thin boots, and too late resort to winter garments, are other sources of danger; as is also inattention to the fact that those advanced in years require warmer clothing and more warmth-producing food than the middle-aged. *Winter Cough*, often regarded with indifference, is, in many cases, but a precursor or symptom of this common disease. "When

an epidemic of Cholera sweeps away its *hundreds*, public attention is attracted, and fear induces attention to the precautions hitherto despised. Bronchitis sweeps away its *thousands annually*, and is surely deserving of more general attention than is ordinarily given to a mere 'winter Cough.'"

EPITOME OF TREATMENT.—

1. *Acute Bronchitis.*—Acon., Ant.-T., K.-Bich., Bry., Phos., Ipec.

2. *In Children.*—Acon., Phos., Bry., Puls. (*loose Cough*); Ipec. (*spasmodic Cough*); Ant.-T. (*accumulation of mucus*); Cin., Sant. (*irritation from worms*).

3. *Chronic.*—Ant.-T. (*much loose mucus*); K.-Bich. (*tough, stringy phlegm*); Carbo. Veg. or Ars. (*great debility*); Ammon.-Carb. (*incessant Cough, with sensation as if there were wool in the larnyx*); Merc. (*purulent expectoration*); Sil., Phos., Sulph., Lach., Cact.

4. *Remedies sometimes required.*—Bell., Coni., Seneg., Ac.-Nit., Spong., Iod., Hyos., Opi.

Another authority gives the following :—Sang. (*spasmodic Cough, copious expectoration, oppression of the chest, stitches or burning;* Hep. S. (*somewhat chronic Bronchitis, profuse yellow expectorations, sensation of a clot of mucus or swelling when swallowing*); Caust. (*with irritability of the bladder*); Rumex Crisp. (*difficult expulsion of phlegm, feeling of soreness all down trachea and under sternum*).

LEADING INDICATIONS.—

Aconitum.—If administered early and frequently, this remedy will materially shorten the attack, and perhaps be curative alone. A short, hard Cough, excited by tickling sensations in the windpipe and chest, inducing frontal Headache; and burning and sore pain in the chest, are also indications.

Bryonia.—Violent Cough, chiefly affecting the upper part of the chest, under the breast-bone, the *trachea and large bronchi*, with copious expectoration of thick yellow mucus, sometimes blood-streaked. Semi-membranous expectoration (*bronchial polypi*). In advanced stages, this remedy is often valuable in alternation with *Phosphorus*. *Bry.* is also useful in the acute attacks of children with suffocative Cough, great agitation, and anxiety.

Kali Bich.—Bronchitis, with irritation in the larynx and chest, and when the *small* bronchial tubes are affected, inducing severe and long-continued paroxysms of Cough, with *tenacious, stringy, opaque-white* phlegm. A yellow-coated tongue, and loss of appetite, are also indications. It is very useful when Catarrh or Influenza run on to Bronchitis; and in chronic Bronchitis, with the above symptoms.

Antimonium Tart.—Paroxysms of *suffocative* Cough, with loose *lumpy* expectoration, wheezing respiration; the whole chest seems to be involved; frequently also there is Palpitation, pain in the loins and back, headache, thirst, etc. In chronic Bronchitis it often promotes expectoration. It is also an excellent remedy in the capillary Bronchitis of aged persons.

Ipecacuanha.—Spasmodic Cough, with or without expectoration of blood, often with sickness, and great difficulty of breathing; also as an expectorant. Useful in cases of tendency to Asthma.

Phosphorus.—Chronic cases, and whenever the lungs are involved, or there is inability to remove the phlegm. In senile or infantile weakness, *Phos.* 1 is very efficacious.

Arsenicum.—Chilliness in the chest; a *suffocative sensation on lying down;* anxious, laboured breathing; or when the lungs do not permit the free entrance of oxygen into the air-tubes, and thus are incapable of expelling the morbid secretions. *Ars.* is well indicated in the *aged or feeble.*

Ars.-Iod.—Frequent Cough, with muco-purulent or stringy expectoration, often aggravated on exertion, and at night; asthmatic sensations, compelling the patient to sit up in bed to breathe; slight night-sweats.

Æsculus Hip.—Bronchial irritation associated with the gouty diathesis, Piles and constipation.

Ammonium Carb.—Copious bronchial secretion of muco-pus; difficult expectoration; dilatation of bronchi; atony.

Baryta Carb.—Chronic cough of scrofulous children.

Carbo Veg.—Chronic Bronchitis in the aged; profuse expectoration, or accumulation of mucus, which the patient is unable to remove; blueness of the nails, coldness of the extremities, and loss of voice. *Solania* is useful in similar cases.

China.—Sustains the constitution under the abundant secretion of mucus. It may be administered alone or in alternation with another remedy.

Administration.—In acute cases, a dose every two to four hours; in chronic, thrice daily.

Kreasote Inhalations.—In chronic Bronchitis, with excessive expectoration, the inhalation of the vapour of *Kreasote*—three or four drops in a pint of boiling water—checks the secretion. It also corrects fœtid sputa.

See also Section 151 on Cough for additional remedies.

Accessory Means.—In acute Bronchitis the diet should be light and liquid, including gum-water, barley-water, gruel, jelly, beef-tea, etc. Free diaphoresis should be induced by frequent draughts of water and extra blankets. In both acute and chronic Bronchitis, great relief is obtained by the use of the Alkaline Mineral Waters of Ems, Seltzers, and Obersaltzbrunnen. The air of the patient's apartment should be maintained at a temperature of about 65° or 70° Fahr., and be kept *moist* by the evaporation of hot water from shallow dishes near the bed; but ventilation should also be preserved. The patient should be somewhat propped up in bed, as that posture tends to obviate the stasis of blood in the lungs, and facilitates deeper inspiration. Congestion of the lungs may be relieved by covering the chest with large hot linseed-meal poultices. Soothing and strengthening effects may be gained by inunction of the chest with olive-oil, gently rubbed in for a few minutes. If there is great prostration, nutritious liquid diet and stimulants are necessary; if they cannot be taken by the mouth, they should be administered in the form of enemata. *After the disappearance of acute symptoms*, it is often necessary to administer Cod-liver oil, in the case of feeble children.

Preventive Means.—The first and most important is, cold bathing in the morning, that particular form of bath being adopted which is found most useful or convenient. (See Bathing, Sec. 32.) Susceptible patients may wear a good respirator whenever exposed to night air, or during inclement weather; but *keeping the mouth shut*, and breathing through the nose only, often answers as well or better than

a respirator. *Such exposure should be avoided* as much as possible.

Another preventive in the case of males is the *beard*, which protects the respiratory passages against the effects of sudden changes of temperature. In many instances, the beard would protect clergymen, barristers, and other public speakers, as well as singers, from the injurious effects of sudden atmospheric variations, from which professional men often suffer.

148.—Asthma (*Asthma*).

Definition.—A spasmodic disease, characterised by paroxysms of difficult expiration, with great wheezing, a dreadful sense of constriction in the chest, usually with dry râles, and often with complete intervals of healthy respiration.

Symptoms.—A paroxysm generally occurs in the night, particularly between midnight and early morning, and is connected with the prone posture and the tendency of the nervous system to reflex action during sleep. The patient wakes suddenly with a sense of suffocation, springs up in bed, and assumes various postures; he even rushes to the opened window, where he leans forward, vainly invoking the assistance of the muscles mediately or immediately connected with the chest to facilitate respiration. He sits in a fixed posture, or stands leaning with his hands or elbows on some article of furniture, in order to raise his shoulders. He wheezes loudly, from the contracted tubes impeding the entrance and exit of air, and labours to move the almost immovable chest like one struggling for life. The countenance bears evidence of great distress, the eyes frequently protrude, the skin is cold, clammy, pale, or, in extreme cases, dusky; the pulse small and quick; the veins of the forehead are distended, and perspiration burst out in large drops, or trickles down the face; while the extremities, especially the feet, are often cold; and he often looks imploringly, sometimes impatiently, at his medical attendant, for relief from his misery. After an uncertain time, one to three hours, or much longer, there comes a remission; often, but not in-

variably, cough and expectoration of mucus ensue, and the paroxysm ceases, permitting the sufferer to fall into the long-desired slumber. The mucus expectorated, however, is not the cause of the attack, but has been developed during it. Occasionally the attacks occur during the day, particularly when caused by dust or fog, the patient seizing the first object that offers support, or leaning against the wall till the spasm abates. About two hours after dinner is not an unfrequent time; but, doubtless, the hours in which an asthmatic patient is most free from his distressing malady are those of the forenoon.

The attacks are unattended with fever, but may be preceded by some disturbance of the digestive organs; they are often periodic and sudden, and attended with distressing anxiety.

Pathology of Asthma.—That the asthmatic paroxysm arises from constriction of the bronchial tubes is evident from the following considerations:—

1. The sudden attack and equally sudden remission point to muscular spasm.

2. There is evidence of the chest being full of air, it is hyper-resonant to percussion, but the absence of the respiratory murmur, together with the fruitless efforts of the patient to obtain his breath, show the air to be in a state of stagnation. What causes this impediment to the ingress and egress of air? Not inflammatory thickening of the air-tubes, or the dyspnœa would be constant; not mucous plugging of the air-passages, for an attack is often unattended by any expectoration.

3. The characteristic musical sounds, so varying as to their nature and locality, indicate similar changes in the points of constriction of the air-tubes.

4. That the spasms are muscular may be inferred from the temporary results produced by *cerebro-spinal depressants*, as emetics, tobacco, etc., which directly tend to induce muscular relaxation.

Physical Signs.—These are less significant than might be expected. On *percussing* the chest during a fit, it is found excessively resonant, showing that the lungs are distended with air, and measurement actually proves the circumference

of the chest to be considerably increased; but on applying the stethoscope, dry sibilant or sonorous rhonchi may be heard, *appearing and disappearing in various parts of the lungs.* These rhonchi, varying in tone as the bronchial tubes are more or less contracted by spasm, produce a discordant concert in the chest, like the tuning of innumerable fiddles, and are interrupted from time to time by the arrest of respiration, and complete absence of the respiratory murmur, as if the air were imprisoned, or in a state of stagnation, in the air-cells. This absence of the normal sound is more complete in proportion as the attack is more severe; and it is probable that a spasmodic contraction of the muscular fibres of the air-passages stops or modifies the respiratory murmur.

Diagnosis.—The physical condition of the chest just pointed out, the abruptness and violence of the symptoms, and, often, the comparatively good health enjoyed between the attacks, are sufficient to identify the disease. If there be any doubt, the following symptoms may help to a diagnosis between the dyspnœa of Asthma, of Bronchitis, of Emphysema, and of Heart disease :—

Bronchitis is ushered in by cold, Asthma not so; in Bronchitis the expectoration is often purulent, in pure Asthma it is never of that nature, and often entirely absent; in severe bronchitic dyspnœa, time is always required to produce relief, while in Asthma this symptom often ceases suddenly upon the administration of remedies.

In Emphysema, the cause of the dyspnœa being organic, this symptom will be always present, and will vary only in degree.

Cardiac dyspnœa possesses many features in common with Asthma, but it gives no indication of the contraction of the air-tubes, as wheezing, prolonged expiration, suppression of the respiratory murmur, etc., and it is shorter in duration than asthmatic dyspnœa.

Asthma differs from *Croup* in the fact that the whole effort is to effect *expiration*, and to relieve the over-distended chest; whereas in Croup the effort is *inspiratory*, the lungs being exhausted of air to the last degree by the repeated cough,

and the return of air being prevented by the exudation and consequent spasm of the larynx.

Causes.—Without now entering upon those which produce a tendency to the disease, the causes of Asthma may be divided into two classes—*the local*, those affecting the air-tubes primarily and directly, and *the general*, those which act through the nervous system, the blood, or by hereditary transmission.

Under the second class of causes we may make three subdivisions: (1) *Injurious inhalations*, as of *dust*—road-dust, dust of flour-mills, bakehouses, threshing-floors, fluff from woollen clothing, horse-hair, and cotton, and all *light* dust which does not penetrate into the lungs, but lodges in, and irritates, the bronchial tubes; *vegetable irritants*, as Ipecacuanha and the pollen of a large number of flowering grasses and plants; *chemical vapours*, as chlorine, sulphurous acid, phosphoric anhydrite of the fumes of recently ignited matches, the smoke of pitch, and the vapour from lead, copper, dyeing, bleaching, or calico-printing works, etc.; *animal emanations*, as the odour of cats, dogs, hares, goats, sheep, horses; *climatic influences*, as damp, cold, strong winds, fog, an electrical state of the atmosphere, malaria, and the contiguity of trees; (2) A *morbid state of the blood*, as when an attack occurs about two hours after taking certain kinds of food. In such cases, the bronchial spasm, not occurring immediately after ingestion, cannot be attributed to the presence of irritating food; but must be due to certain properties, the result of digestion, then being absorbed by the circulation. This hypothesis is borne out by the variation in the time which elapses between the ingestion and the attack, that interval being longer or shorter according to the rate of absorption of different kinds of food; and (3) if it be not already anticipated under the first class, *inflammation of the bronchial mucous membrane*. There can be little doubt that diseases which, in children, affect the mucous membranes of the respiratory organs, predispose the sufferer to Asthma in after-life. Such are Measles, Whooping Cough, etc.

Among remote or indirect causes, acting through the nervous system, we may mention strong passions or mental

emotions, as anger, fear, jealousy, disappointment, psychical irritants of the cerebral nervous centre; and cold feet, constipation, flatulence, indigestion from eating certain kinds of food, as cheese, salad, pastry, new bread, twice-cooked meat, etc., in which the periphery of the nerves is affected. The nervous character of Asthma is further shown by the therapeutic fact that sudden emotion of any nature, provided only that it be intense, will also put an end at once to most distressing paroxysms.

Gastralgia, Neuralgia, Hemicrania, Angina pectoris, and skin-diseases sometimes alternate with Asthma, the Asthma disappearing on their recurrence, and returning as they cease. They can, however, hardly be regarded as causes, but are most probably cognate results of the same systemic disturbance. After it has once occurred, Asthma is easily reproduced by Indigestion, especially after *late dinners* or *suppers*. A frequent repetition of the fit leads to a dilated state of the air-passages and air-cells of the lungs (*Emphysema*), dilatation of the right cavities of the heart, and the general displacement of that organ which uniformly exists in persons who have *long* suffered from this disease.

Asthmatic Diathesis.—When the disease is hereditary, the predisposition passes from father to son, from mother to daughter. Such children have a peculiar square-shaped chest, the shoulders being raised, and the head half-buried between them. Under favourable conditions, the disease does not appear till late in life, and may be warded off altogether; but if Asthma be undeveloped, the children are frequently carried off by Consumption.

Prognosis.—Patients do not die of Asthma, though it is not rare for them to die of the heart-disease or dropsy which result from repeated attacks. If the patient be under fifteen, the chest well formed, if the attacks be neither frequent nor severe, and if an absence of all distressing symptoms during the interval indicate a sound state of the respiratory and circulatory organs, a most hopeful prognosis may be given. But in proportion to the prevalence of opposite conditions will the prognosis be unfavourable. Asthma is less likely to have a favourable issue in advanced life than in childhood

or early youth, because with the diminished hope of losing any hereditary tendency to the disease, there is increased probability of its arising from some organic cause. If unchecked, the tendency of the disease is to increased frequency and severity of attack, and consequent organic disease —Emphysema, dilatation of the heart, or Dropsy—resulting in death.

EPITOME OF TREATMENT.—

1. *For the attack.*—Acon., Ipec., Verat.-Vir., Cup., Lob., Ac.-Hydroc.

2. *Asthma of children.*—Samb., Ipec.

3. *From suppressed eruptions.*—Graph., Sulph., Zinc.

4. *Chronic Asthma.*—Ars., Nux V., Sulph., Arg.-Nit., Cocc., Plumb.

LEADING INDICATIONS.—

Ipecacuanha.—A tight sensation in the chest, panting and rattling in the windpipe, which feels as if full of phlegm; coldness, *paleness*, anxiety and *sickness; troublesome cough.* A dose every ten or fifteen minutes during an attack: afterwards every three or four hours.

Aconitum.—The striking power of this great remedy in affections of the pneumogastric nerve, characterised by imperfect and laboured breathing, has suggested its use in *spasmodic Asthma*, during the *paroxysms* of which we have often administered it with marked and speedy relief. It is especially indicated by oppressive anxiety, dyspnœa, and laboured action of the heart. It is the best palliative in bronchitic Asthma.

Lobelia Inflata.—*Pure nervous Asthma*, with a constrictive, suffocative sensation; spasmodic cough, vomiting, giddiness, etc.

Cuprum.—Chiefly indicated in attacks of nervous Asthma.

Kali Hydriod.—This medicine is attended with marked success when prescribed in low attenuations, from ϕ to 3x, and *persevered in.* Dr. Small's experience accords with our own in this matter. In cases that have not yielded to other remedies, in *rheumatic* or *syphilitic* patients, it is especially indicated.

Kali Carb.—Paroxysms occurring in the early hours of the morning.

Nux Vomica.—Probably the best anti-Asthmatic remedy. It is homœopathic to that condition of the *digestive system* which is the most common cause of the *irritation* which results in bronchial spasm. Again, "after the paroxysm subsides, it leaves a condition of the digestive organs for which *Nux Vomica* is the great remedy. The tongue is coated with a thick, yellow fur; there is often slight nausea, flatulence, and constipation. Besides, the breathing is seldom quite right; generally there remains a sort of physical memory of the struggle. The patient feels that no liberties must be taken, either of diet or exercise. Out of this secondary state of bondage nothing will liberate so effectually as *Nux Vomica*" (*Russell*).

Arsenicum.—Short, anxious, wheezing breathing; aggravation of the sufferings on *lying down*, and upon the least movement; *periodic*, suffocative attacks, with pale or bluish face. It is especially useful in the *aged* and *feeble* and in chronic Asthma, with *burning heat* in the chest, cold sweats, and prostration; also when complicated with *heart-disease*, or following Bronchitis or Catarrh.

Veratrum.—Violent paroxysms of spasmodic Asthma with *coldness* of the nose, ears, and feet, *cold perspirations* and great prostration.

Cannabis Sativa.—Humid Asthma: extreme agitation, dyspnœa, wheezing, and mucous râles. As the attack declines an easy rattling cough brings up copious, thick yellow sputa.

Sulphur.—Chronic Asthma apparently connected with Gout, *skin eruptions*, or some other *constitutional taint:* also after other medicines have but partially succeeded.

Chloral Hydrate.—In inveterate cases, fifteen grains of this drug may be given at a dose, and should the spasms return after the sleep generally induced by it, a second dose may be given. If necessary it may be repeated every three or four hours. But the professional attendant should watch the result.

Ant.-T., *Eup.-Perf.*, *Rumex*, *Bell.*, *Stann.*, *Lach.*, and *Liq.-Sodæ Chloratæ* should be noted.

Eucalyptus Oil Dr. Dalzell has prescribed for Chronic Bronchial Asthma with good results. See *Homœopathic World*, vol. xxv., pp. 106 and 158.

Accessory Means.—During a fit, striking relief may often be obtained by putting the feet and hands into hot water. Smoking *Stramonium* at the commencement of a fit, is said to remove it like a charm in some; in others, however, it fails altogether. The efficacy of *Stramonium* may be tested in two ways, taken internally or by smoking. The latter has proved most generally successful. The frequency and severity of attacks may be diminished by smoking, say morning and night, or the remedy may be kept at hand for immediate use upon the first warning of a paroxysm. *Sulphur*, *Turpentine*, or *common salt*, either inhaled from hot water or by spray producer, may severally be tried. *Coffee* as strong as it can be made, and as hot as it can be taken, without milk or sugar, is sometimes palliative. "Among stimulants, coffee is, perhaps, the best known, and the most generally efficacious. I find, in the majority of cases of Asthma that come before me, that coffee has been tried, and that it has given relief. It should be made as strong as possible, *café noir*, taken as hot as it can be swallowed, without either milk or sugar. It should also always be taken upon an empty stomach; coffee taken with food not only does no good, but does positive harm by impeding the process of digestion. I have known more than one case, as I have mentioned elsewhere, in which coffee made in the ordinary way, and taken immediately after dinner, had a strong tendency to induce Asthma; although, taken in the way I have above described, it had a very powerful beneficial influence."—*Reynolds' System of Medicine.* Holding the breath as long as possible helps to relax the spasm. In obstinate cases, *inhalation* of *Chloroform* may be employed to relax the contracted muscular fibres. Though the remedial effects of Chloroform generally, but not invariably, pass off with the induced stupor, it is still very valuable for the immediate relief which it affords; as also in cases in which Asthma never occurs during sleep. But it is not always a safe remedy, and cannot, therefore, be entrusted to the patient or his friends, and there is great danger of its use being too frequently indulged in. *Tobacco-smoking*, and other similar measures, are of little ultimate utility, and are, moreover, often rendered unnecessary by homœopathic treatment.

Smoking is also open to many objections. The painful sensation produced may exceed that of sea-sickness; occasionally tobacco-smoking is followed by alarming symptoms, and habitual use has, in the majority of adult male patients, in a measure deprived this depressant of its original physiological properties. If prescribed for those unaccustomed to it, great caution should be observed, the mildest forms selected, and smoking continued just long enough to induce a slight feeling of faintness and nausea, but not so as to cause vomiting. Relief is often obtained by the fumes of burning *Nitre;* a piece of blotting paper, about the size of the hand, previously saturated in a solution of the nitrate of potash, may be placed on a plate, and ignited for the purpose, when the fumes will be diffused throughout the room, their influence soon becoming evident. A warm saturated solution of saltpetre, into which the patient can dip the paper himself, answers the purpose equally well. Many patients habitually go to sleep amid these nitrous fumes with a certainty of a sound undisturbed rest; others have the papers in readiness wherever they go, and usually obtain relief from a few minutes' inhalation of the fumes. Inhaling the fumes of *Nitrite of Amyle* is another remedy which sometimes gives speedy relief. But in adopting any of these expedients ventilation must not be neglected; the windows should be regularly thrown wide open to renew the air of the apartment.

Prophylactic Measures.—Persons predisposed to Asthma should strictly avoid all its exciting causes, especially indigestible food, and heavy suppers; wet feet, damp clothes, and sudden changes of temperature. The inclination to *stooping* should be corrected, and the shape and capacity of the chest improved by a systematic course of drilling. The "general plan of dietary" sketched in the first chapter of this volume (p. 26), should be adhered to; for the slightest disorder of the stomach may occasion an attack. Pastry, highly-seasoned dishes, too great a variety or too great a quantity at one meal, coffee, and heating beverages, should be avoided. More is to be done for many asthmatic patients by attention to the stomach than in any other direction. In some cases, the diet should be weighed, the hours of meals fixed and

rigidly adhered to. An important point is to take the most substantial meal early in the day, with little solid food after 2 p.m., so as to allow time for its complete digestion before retiring to bed. But although suppers are generally injurious, a cup of bread-and-milk or a sandwich is acceptable in the evening, and is by no means hurtful to an asthmatic patient desiring food at that time. When Asthma is the result of indigestion simply, though the tendency to the complaint must be commensurate with life, its attacks may be completely averted by dietetic precautions on the part of the patient.

The *Shower-bath* is a valuable and potent agent to fortify the body against Asthma; the sudden application of water strengthens the whole system, and renders the body less sensitive to atmospheric changes. Out-of-door exercise, walking or riding, is also useful; but it should not be taken within one or two hours after a meal, or to such an extent as to occasion fatigue.

Power of Climatic Conditions.—With regard to climatic influences, it is remarkable that though certain states of the atmosphere, and particular localities, invariably affect the asthmatic, so much so that a patient who is attacked at Bath, for instance, and is free so long as he remains away from that place, upon his return thither, even after an interval of twenty years, would be liable to another attack; still it is impossible to determine in what this subtle influence consists. Probably the most effectual means of preventing the recurrence of the disease is to remove to a part of the country where the opposite conditions of soil and climate exist, to those in which the disease has originated—from damp to dry, from close to open, from valley to hill, from wood to plain, from upland to sea-shore, or from country to town. It has been frequently found that the smoky, dense atmosphere of large towns—London, Manchester, Glasgow, Edinburgh, Leeds, Sheffield, etc.—has effected a cure even in the most chronic and unyielding cases. But it may be taken as a general rule that a somewhat moist relaxing air is less conducive to the disease than one in which the opposite characteristics prevail.

149.—Pneumonia (*Peripneumonia*)—Inflammation of the Lungs.

Definition.—Acute Inflammation of the true lung-tissue, in contradistinction to that which affects the air-tubes of the lungs (*Bronchitis*), and that of the investing membrane of the lungs (*Pleurisy*); the febrile symptoms are severe, appear very rapidly, and, in favourable cases, as rapidly disappear between the fifth and tenth days, while the products of the Inflammation still remain.

If one lung only be involved, it is termed single Pneumonia; if both, double. The latter occurs in about one out of every eight cases; in the single variety two cases out of every three are Pneumonia of the right lung. The portions chiefly involved are the lower posterior and the base of the lung. The disease frequently co-exists with Pleurisy, when the double affection is called *Pleuro-pneumonia*.

Symptoms.—Pneumonia generally comes on insidiously, with restlessness and febrile disturbance, and sometimes makes great progress before the true character of the disease is suspected. In the commencement, there is a rigor, or fit of severe shivering, which lasts from half-an-hour to several hours before the feeling of warmth returns; at the same time, the thermometer will register an elevation of temperature. This elevation may reach 102·5° in four hours, and 104° in twelve hours. In children, convulsions may occur instead of rigor. In old persons, rigor invariably occurs. After a while there is deep-seated, dull pain, referred to the scapulæ, or felt as an oppression under the sternum; a great feeling of illness; frequent, short cough, with expectoration of viscid matter of a rust colour, sometimes tinged with blood, which forms such tenacious masses that inversion of the vessel containing them will not detach them. Prune juice coloured expectoration is a serious symptom. Children under three, however, rarely expectorate. The breathing is hurried and difficult; the skin hot, especially in the regions of the ribs and armpits; there is no moisture in the nostrils, which "flap," and the eyes are tearless; there exists great thirst; interrupted, hesitating speech; the pulse is variable, being

sometimes rapid and full, at other times hard and wiry, or quick and weak; the urine is scanty, red, and sometimes scalding; and the patient lies either on the affected side or on his back. If the disease is unchecked, the face often exhibits patches of redness and lividity; the blood-vessels of the neck become swollen and turgid; the pulse weak, irregular, or thready; and the patient may sink, either from exhaustion, or from obstruction of the lungs.

Physical Signs.—On percussing the chest of a person in health, a hollow, resonant sound is returned, proving the presence of air. If we apply a stethoscope * to the chest, we hear, as the patient breathes, certain sounds produced by the air entering the air-cells,—"*the vesicular murmur.*" In Pneumonia, these sounds become changed; there is dulness on percussion; and, in the first stage, by auscultation, *minute crepitation* may be heard, which has been compared to the sound produced by the rubbing a lock of hair between the finger and thumb close to the ear. In the next stage, the sound just described cannot be heard, for as the Inflammation proceeds, the soft and spongy character of the lung is lost, and it becomes consolidated by organisation of the effused fibrine in the air-cells, and resembles the cut surface of the liver; this condition is called *Hepatisation. Percussion* elicits great dulness over the whole of the affected part. During convalescence, as the air-cells open, *minute crepitation* may be again heard, and afterwards the natural vesicular murmur.

In persons having a low vitality, purulent infiltration may occur, which consists of diffused suppuration of the lung-tissue. In rare cases, a circumscribed Abscess forms, and on applying the ear to that part of the chest, a gurgling sound may be heard; this condition is usually preceded by rigors; and a hollow or cavernous sound follows when the Abscess has been emptied by coughing and expectoration.

* The stethoscope if undoubtedly useful in confining the ear to one spot, and in the choice of a spot for auscultation, but the notion that it assists the ear is unfounded. The sounds within the chest are best heard by applying the ear to it immediately; but as that is not always convenient, recourse is had to a stethoscope.

The occurrence of copious expectoration of whitish or yellowish mucus, general perspiration, a sudden abundant discharge of urine with copious sediment, Diarrhœa, or even bleeding of the nose, may be regarded as forming a crisis, encouraging the hope of a favourable termination.

Occasionally, in old or enfeebled constitutions, *Gangrene* of a portion *of the lung* may occur. This condition is easily recognised by a most intolerable odour of the patient's breath, resembling that proceeding from mortification of external parts. Unless the gangrenous portion is extremely limited, the case is almost certain to terminate fatally.

Prognosis.—In prognosis, great weight should be given to two points; age, and the side attacked. The fatality of *Pneumonia* in patients from 21 to 30 years of age, may be taken as 9·30 per cent.; from 31 to 40, only 3·70 per cent.; in the next stage, there is an increased percentage of nearly ten, the number being 13·33; in the following decade the death-rate is more than trebled, being 47·06; from 61 to 70 years of age, it is 55·55, an increase of 8·4 only; and from 71 to 80, it is 83·33, an increase of 27·78 as compared with the preceding period. Again, the right lung is broader but shorter than the left, therefore infiltration to the same level would produce greater danger in the right than in the left lung, because more respiratory surface would be lost. There is also greater resistance to the return of blood to the heart in the right side than in the left, the vein of the former having a longer path to traverse, and therefore venous stagnation more frequently causes œdema in the right than in the left lung. Accordingly, deaths from right Pneumonia occur more frequently than from left Pneumonia, in the proportion of 14·8 to 6·0.

Causes.—Severe or long-continued exertion, or over-fatigue, either alone or combined with Cold. Brief exposure to *cold*, however intense, is rarely sufficient to excite this Inflammation; it is rather a *prolonged and deep-reaching cause* that can produce this effect. "Thus, if a person gets thoroughly wet, and remains long in wet clothes, or lies out on damp ground, or a sentinel stands or slowly paces for hours in a cold wind, the chill goes to the heart, as it were, and paralyses the deep

circulation, and Pneumonia is likely to be the result. Boys who get heated at football, or some other violent exercise, throw themselves on the damp grass, or remove clothing to cool themselves, or stand about, when the chill, operating on the exhausted body, causes extreme Congestion in the lungs, the circulation of which has been weakened by the previous violent respiratory efforts. The result is Pneumonia, generally asthenic, commonly double, and attended with much prostration."—*Dr. C. J. B. Williams.*

EPITOME OF TREATMENT.—

1. *At the onset.*—Acon. in alternation with Phos. In previously healthy patients, and in uncomplicated cases, these two medicines are generally sufficient.

2. *Pleuritic complication.*—Bry., in alternation with Phos.

3. *Bronchial complication.*—Ant.-T., alt. Phos.

4. *Other conditions.*—Chel.-Maj. (*liver complications*); K.-Carb. (*double Pneumonia*); Ars. or Ac.-Nit. (*aged persons or feeble constitutions*); Iod., Brom., Ac.-Oxal. (*scrofulous patients*); Sulph. (*tedious, or sub-acute*); Rhus Tox., Ars., Ars. Iod., Hep. S., Ver.-Vir., or Bapt. (*enteric symptoms*); Carbo Veg., Ars., or Lach. (*foul breath, Gangrene,* etc.); Cact. (*Congestion in the chest*); Ver.-Vir. (*also cerebro-spinal irritation*); Arn. (*from injury or over-exertion*); Lyc. (*deep-seated pain, or bronchial irritation left by Pneumonia*); Hyos. (*night cough*).

In the treatment of Pneumonia three points should be specially kept in view; namely, the pulse, the breathing, and the temperature; for as these rise and fall, so a favourable or an unfavourable prognosis may be given. Whatever remedies or measures tend to reduce these, furnish by that reduction an evidence that proper treatment is being pursued.

LEADING INDICATIONS.—

Aconitum.—At the first invasion of cold and feverish symptoms; restlessness; *malaise;* pain between the shoulders, or in the chest; short cough; general fever disproportionate to local inflammation; evening exacerbations.

Phosphorus.—Symptoms as for *Acon.* aggravated; severe pain and incessant cough; *expectoration* of pale, yellow, or green mucus, or tinged with blood, or very tenacious; rapid pulse; *crepitation;* flapping of the nostrils; dyspnœa; ex-

haustion. *Phos.* is the chief medicine in Pneumonia, and is curative in the great majority of cases.

Bryonia.—Pleuritic symptoms; dry cough, little expectoration; *stitching or catching pains* in the chest.

Veratrum Vir.—This remedy is particularly valuable for *extreme congestion* of the lungs, especially during the early stage of Pneumonia.

Antimonium Tart.—Bronchial complications; irritation of the throat; *capillary congestion;* wheezing breathing; profuse, easy mucous expectoration; complication with *Delirium Tremens.*

Acid.-Nitricum.—Dry, short cough; difficult expectoration; fits of coughing; uneasiness in the chest; soreness at the bottom of the sternum; *general physical depression* and consequent mental depression; want of appetite; constipation; unrefreshing sleep.

Chelidonium.—Involvement of the *right* lung and liver.

Kali.-Carb.—Double Pneumonia; copious infiltration; *coarse vesicular murmurs;* excessive dyspnœa; Hectic symptoms; intermittent pulse; tenacious mucus.

Sulphur.—Chronic and later stages of acute Pneumonia. The waters of Sulphurous springs are beneficial.

Accessory Means.—The apartment should be warm, from 60° to 65°; the bed-coverings light, and the patient well wrapped up whenever he gets out of bed. A raised posture is found best in all inflammations of the chest. A large, thick linseed-meal poultice, or *spongio-piline*, to fit the chest in front and back. A continuous poultice is one of the best methods of providing for the local loss of vitality in Pneumonia and similar diseases. Niemeyer says, "In all cases I cover the chest of the patient, and the affected side in particular, with cloths which have been dipped in cold water and well wrung out. The compresses must be removed every five minutes. Unpleasant as this procedure is in all cases, yet even after a few hours the patients assure me they feel a material relief. The pain, dyspnœa, and often the frequency of the pulse, are reduced. Sometimes the temperature goes down an entire degree." The patient must be kept very quiet, have mucilaginous drinks and farinaceous diet, and be treated generally as directed under Sections 26, 28, 33, 38, and 46.

150.—Pleurisy (*Pleuritis*).

Definition.—Acute Inflammation of the *pleura* (the serous membrane which invests the lungs and lines the thorax).

In health, the pleura has a smooth, lubricated surface, to permit the free motion of the viscera it encloses; Inflammation destroys the polish of this surface, so that movement of the membranes, or of the lungs, is rendered difficult and painful.

Pleurodynia (*false Pleurisy*) is pain in the chest-*walls*, and does not belong to the pleuræ, or lungs (see Section on Neuralgia).

Symptoms.—The disease comes on suddenly and violently, with rigors, fever, and *lancinating, stabbing pains*, often called "stitches in the side," commonly felt below the nipple, and usually affecting only one side; the pains are acutely increased by coughing, by pressure, or by the least attempt at a deeper inspiration, which the patient soon refuses to take. There is tenderness at the intercostal spaces, and the breathing is diaphragmatic, the movements of the ribs being restrained, and the lungs only partially filled with air. There is also a short, frequent, dry cough; parched tongue; flushed face; hard, wiry, quick pulse (about 100); scanty, high-coloured urine; and the patient constantly desires to lie on the affected side, or on the back. When the lung is also involved, the expectoration is very copious, and streaked with blood.

The Inflammation, however, soon terminates either in *resolution*, when the two surfaces of the pleura regain their smooth and moist characters; or the roughened and inflamed surfaces become more or less *adherent*, or *effusion* takes place, and a dropsical fluid separates the surfaces, a condition known as *Hydrothorax*. In severe cases, the effusion may be so excessive as to compress the lungs and heart, and to suspend their functions. Sometimes there is copious suppuration, the pus filling the pleuritic cavity, when it is termed *Empyema*. This condition is likely to arise in bad constitutions, and also when the Inflammation has resulted from injury, or the presence of foreign matter in the cavity. The quantity of effusion may

be estimated by the dyspnœa, being greater in proportion as the lung is more completely compressed, as also by the extent of the dulness on percussion.

Physical Signs.—On applying the stethoscope to the affected part of the chest at an early period, the dry, inflamed surfaces may be heard rubbing against each other and producing a *friction sound;* this rubbing may also be *felt* by placing the hand on the corresponding part of the chest; it is probably due to the pleura being preternaturally dry by exhalation, or to its being roughened by effusion of fibrine. This sound is only to be heard for a short time, because the opposite surfaces either become glued together, or, more probably, separated by serous effusion; in the latter case there is dulness on *percussion* at the lower part of the chest, as high as the level of the fluid. To the same extent the respiratory murmur is also lost. *Ægophony* may also be heard there occasionally. At the same time, the patient, though at first he preferred to lie on the sound side, is compelled to turn to that which is affected, so that the movements of the healthy lung may not be impeded by the superincumbent weight of the dropsical pleura.

Causes.—Exposure to atmospheric vicissitudes, and sudden checking of the perspiration, are the most frequent causes, especially in persons of unhealthy constitutions: surgical operations and mechanical injuries are frequently exciting causes; thus the rough ends of a fractured rib may set up Inflammation of the pleura. It may also be excited by extension of other diseases. The cause of the disease may materially alter the treatment.

Treatment.—*Aconitum.*—In the early stage of the disease. After two or three doses, its beneficial effects are often marked by perspiration, which contrasts most favourably with the hot, dry skin, urgent thirst, quick pulse, and general suspension of the secretory functions which previously existed.

Bryonia.—This is a remedy of great power in Pleurisy (as in all other Inflammations of serous membranes), even in its most violent forms. Its special indications are—stinging, shooting, or burning *pains in the side, aggravated by breathing or movement;* painful, dry Cough, or Cough with expectoration

of glairy sputa; laboured, short, anxious, and rapid respirations, performed almost entirely by the abdominal muscles; weariness, disposition to retain the recumbent posture; irritability, restlessness, etc. A dose every one to three hours, alone, or in alternation with *Acon.*

Arsenicum.—Tedious cases; when much effusion has taken place, evidenced by painful, *oppressed breathing*, occasional attacks of suffocation, etc; *coldness of the body, exhaustion.*

Apis.—When *Arsenicum* is indicated and fails.

Iodium.—Scrofulous patients, in whom the disease is protracted. Even when effusion has occurred, *Iod.*, in alternation with *Acon.* or *Bry.*, is still the best remedy for the strumous.

Phosphorus.—If the lungs are affected (*Pleuro-pneumonia*); also in persons of weakly constitution, sensitive lungs, and predisposition to Consumption. The expectoration is *rusty-coloured*, and there is much prostration.

Antimonium Tart.—Cough, with rattling of mucus, oppressed breathing, sometimes nausea, *profuse expectoration*, violent throbbings of the heart, and a sense of suffocation.

Arnica.—Pleurisy supervening upon long-continued and laborious exercise, or from external injury; especially when pain and soreness remain, or when much fluid has been effused: in the latter case, *Arn.* tends to promote its absorption; as does also *Kali Hyd.*

Sulphur.—When the lancinating pains in the chest have subsided, *Sulphur* will often complete the cure. It is also advantageous as an *intercurrent* remedy when recovery is slow, and when the breath and expectoration are *fœtid.*

Ac.-Tannic.—Spontaneous and profuse evacuation of pus; much effusion.

Senega.—Pleural effusion, sub-acute or chronic, consecutive or idiopathic; pneumonic complication, after failure of *Bry.*

Cautlaris, Hep.-S., and *China* are also useful. The latter when there are great prostration and much fever.

For further remedies for the Cough, see next Section.

Accessory Measures.—Perfect quiet, with a semi-recumbent posture, and a light diet of gruel, arrowroot broth, and frequent sips of cold water to allay thirst, will be found beneficial. In case of effusion into the pleura, the diet

should be dry, in order that the decreased supply of liquid may stimulate the blood to absorb the serum. Application of heat in the form of poultices, flannel wrung out of hot water, etc., applied to the painful part, will often afford immediate relief. A flannel bandage attached round the chest, or across the shoulders, will moderate the pain by gently restraining the movement of the ribs. When pain in the epigastrium, attended with dyspnœa, indicates that Inflammation of the Pleura overpowers the diaphragm, the action of that organ requires the restraint, and the bandage should be applied rather loosely over the abdomen. Dr. Roberts, of University College, advocates *rest* in Pleurisy, and secures it in early stages when the inflammation and friction-sound are limited, by *mechanically fixing the entire side*, with strips of plaster four or five inches wide. The first strip is laid on obliquely *in the direction of the ribs*, the second *across the course of the ribs*, the third in the direction of the first, about half overlapping it, the fourth as the second, and so on until the entire side is covered. Many cases, it is said, have been cured very quickly simply by this means.

151.—Cough (*Tussis*).

Definition.—A violent, noisy expiration followed by a rapid inspiration, each following the other in quick succession. Cough is termed *dry* when it is not attended with expectoration ; *moist* when it is.

Cough is a symptom of disease, rather than a disease *per se*. Occasionally it is idiopathic ; but it is usually a natural effort to expel irritating secretions from the bronchi and lungs, when they have accumulated as the result of some diseased condition. It is often the forerunner or attendant of some of the most fatal diseases of our climate, and should, therefore, never be neglected. There are many varieties of Cough, for which we have subjoined a list of the remedies in most frequent use, adding the leading characteristic symptoms of each.

EPITOME OF TREATMENT.—

Recent Cough.—Acon., Ipec., Bell., Gels.

Chronic Cough.—Calc.-C., Sulph., Merc., Senega, Stann., Ant.-T., Ac.-Nit.

Cough worse at night.—Ac.-Oxali., Bell., Merc., Dros., Hyos.

Cough worse in the morning.—Rumex, Kali.-B.

Cough worse on lying down.—Puls., Coni., Dros., Hyos., Lauro.

Cough relieved on lying down.—Mang., Sepia.

Cough, Spasmodic.—Alum., Ac.-Nit., Ipec., Ver.-Alb., Cocc.-Cact., Caust., Cup., Dros., Hyos., Kali.-Carb.

Cough Moist.—Ant.-T. 3x, Ipec., Merc., Stann., Bry., Hep.-S., Puls.

Cough, Dry.—Acon., Bell., Alum., Ant.-T., Arn., Hyos., Caust., Brom., Ac.-Nit., Graph., Iodine, Kali.-Bich., Coni., Merc., Phos., Rumex, Sepia, Spong., Bry.

Cough, Nervous.—Ign., Ipec., Coni., Dros., Hyos.

Cough, Dyspeptic.—Nux V., Ver.-Alb., Hep.-S.

Cough in Children.—Cham., Puls., Cimic., Hyos., Gels., Ant.-T.

Cough, with vomiting.—Ipec., Ant.-T., Dros., Cocc. Cact.

Cough, with Congestive Headache.—Bell., Glon., Bry.

Cough, with Hæmoptysis.—Ipec., Arn., Ferr.-Acet., Sulph.

Cough, with Hoarseness.—Gels., Brom., Iod., Spong., Phos., Carb.-V., Caust., Hep.-S.

LEADING INDICATIONS.—

Acid Nitricum.—Chronic cough*; general lassitude and weakness, unusual weariness and loss of energy; mental depression; occasional headache; no gastric irritation, but want of appetite, feeling of fulness after meal, pain in stomach, fastidiousness; constipation; loss of flesh; at right hot skin, thirst, sweats, unrefreshing sleep. Non-phthisical cough; coming on chiefly during the day, nearly dry, or difficult mucous expectoration, or much sputum; short cough, or "fits" causing retching, with uneasiness in the chest and soreness at the bottom of the sternum; much cough on first waking or getting up, with much mucous expectoration, little cough during the day, but renewed at

* See Dr. Dyce Brown's paper in *H. World*, vol. ix. p. 169.

bed-time. Long-standing, short, dry, teasing, *laryngeal* cough without expectoration; local stinging or smarting as from a small ulcer, continuing all day and on first lying down, but ceasing with sleep. Cough of persons with *non-tubercular* phthisis, *when active disease has subsided*, but physical signs of phthisical depression remain; much muco-purulent expectoration, worse in morning and on lying down at night.

Acid.-Oxalicum.—Cough worse at night, with nausea, and pain in the back.

Aconitum.—A dry, hard, *recent* Cough, with restlessness, flushed face, Headache, thirst, burning dryness in the throat, scanty urine, confined bowels, etc. Useful in the incipient stage of catarrhal, and in inflammatory, conditions of the air-passages, accompanied by general fever. Taken early it shortens the course of a cough. It may also be given with advantage when a cough is suddenly developed in the course of chronic disease.

Alumina.—Cough caused by elongation of the uvula; dry cough occurring soon after waking in the morning, in paroxysms like Whooping-cough; soreness of throat and emaciation.

Antimonium Tart.—No medicine has wider range in different coughs. In the 1st cent. dilution it is useful in the treatment of dry, hoarse, fatiguing coughs; the 3rd cent. dilution is better adapted for a loose, rattling cough with difficult expectoration. Cough with vomiting of food after meals. Threatened paralysis of the lungs. Cough in children during dentition. Second stage of Pneumonia. Chronic Bronchitis in the aged. Patient yawns after coughing.

Arnica.—Dry, shaking cough. Hæmoptysis.

Arsenicum.—Debility, tightness of chest, asthmatic symptoms, difficult breathing at night.

Belladonna.—Short, *dry*, hollow, barking, convulsive Cough, generally worse at night, in bed, better from cold, excited by a sensation of tickling in the throat as if dust had been swallowed; accompanied by flushed face, Headache, and other symptoms of Congestion of the head.

Bromine.—Like *Iod.* and *Spongia, Brom.* is indicated in affections of the upper part of the air-tubes. Dry cough of catarrhal origin; dry, croupy cough (like that of a sheep), grating and tickling, with hoarseness; tumefaction and hypertrophy of the mucous membrane; feeling of coldness in the larynx. When indicated, *Brom.* acts very promptly. (Compare *Spong.* and *Iod.*)

Bryonia.—This has been aptly termed *the loosening remedy.* The *Bry.* cough is a concussive one, the chest and head feeling as if they would burst. A hard, dry, shaking Cough, worse in the day-time, attended with pain in the side, stitches in the chest and head; Cough aggravated by passing from warm air to cold, or *vice versâ;* loose Cough, with white or yellow expectoration, sometimes streaked with blood; nausea and vomiting.

Calcarea Carb.—Chronic cough of strumous and tuberculous patients.

Causticum.—Dry cough with hoarseness, and *involuntary emissions of urine* during the paroxysms.

Chamomilla.—Cough of *children during teething*, with wheezing breathing, *fretfulness*, etc.

Cimicifuga.—Cough of children; worse on going into the open air; sympathetic cough.

Cina.—Dry hoarse cough, with worm symptoms.

Chelidonium.—Not much expectoration, but is forcibly ejected after hard coughing.

Coccus Cacti.—*Spasmodic* cough, paroxysms coming on after midnight so violent as to cause vomiting; copious expectoration.

Conium.—Periodical dry cough, preceded by itching or grating in the throat. The cough is increased by *lying down*, talking and laughing. Nervous cough. Sensation as of a dry spot in the larynx.

Cuprum.—Patient trembles after coughing. The cough is better after drinking cold water. *Spasmodic* coughs, Asthma, Pertussis, and Laryngismus stridulus.

Drosera.—Nervous, sympathetic, *spasmodic* Coughs, worse at night, with *retching* or *vomiting*, and sometimes *blood-streaked sputa. Cough comes on in fits,* "One cough follows

another uninterruptedly, compels the recumbent sufferer to sit up." The cough is worse on lying down, and is very troublesome at night. Patient perspires on waking. The best remedy after *Acon.* in uncomplicated Whooping-cough. Cough following Measles, especially if paroxysmal. Dr. Dyce Brown informs us that a dry, spasmodic cough causing vomiting is well met by *Dros.* 12, or *Cupr.-Met.* 6; he prefers *Dros.* 12 to any other dilution.

Ferri Acetate.—Tickling cough, with *Hæmoptysis.* Tickling irritation in the larynx and at upper part of the sterum, causing dry, hacking cough, with scanty expectoration, frequently tinged with blood; worse on change from cold to warm room.

Gelseminum.—Severe in children. Soreness in throat and chest, with hoarseness and aphonia. Relaxation of throat from return of hot weather after winter; Bronchial and pneumonic coughs in early stage when there is not the excitement calling for *Acon.*

Graphites.—Dry cough, gruff voice.

Hepar Sulphur.—Irritating Cough, with Hoarseness and smarting in the throat, forcible expectoration of round pellets of mucus, grating in the larynx, and mucous râles, excited or aggravated by exposure to cold or atmospheric changes. *Cough with chronic Indigestion.* Dr. Hirschel says, "In acute varieties, when the resolution is occurring spontaneously, and in those *moist kinds of coughs* depending on an organic or catarrhal basis, *Hepar Sulph.* is the most important remedy, whether the seat is located in the upper or lower air-passages."

Hyoscyamus.—*Nervous, dry,* spasmodic, tickling Cough, affecting *old persons, children,* and *hysterical women, worse* at night, and especially *on lying down.*

Ignatia.—Hysterical cough. Sleepiness after coughing.

Iodium.—More slow in its action than *Brom.* (q.v.) Dry, croupous cough, tickling and soreness in the larynx; a barking cough with whistling and rattling in the chest. Hoarseness. Sputum greyish white, sometimes saltish. It is particularly useful when exudation has occurred: It affords relief in Tuberculosis.

Ipecacuanha.—Irritating, nervous *spasmodic,* suffocative

cough, with difficult breathing, *nausea, vomiting* of food, and mucous tracheal râles. The early stage of Whooping-cough.

Kali Bichromicum.—Dry, short, tickling cough; redness of the fauces; pain as if there were an ulcer in the larynx; retching. Cough, with *tough, stringy expectoration*, preceded by much wheezing, accompanied with difficult breathing, and followed by dizziness. Like Whooping-cough without the "Whoop."

Lachesis.—Cough of heart disease (also *Ars.* and *Dig.*); "throat cough," extreme sensitiveness of throat to the touch; as if there were something there which ought to be coughed up to give relief.

Laurocerasus.—Irritative cough, depending on *cardiac* affection; cough worse at night on lying down.

Manganum.—Cough coming on about 5 p.m. and almost incessant *until* the patient *lies down*. Irritation about the centre of the sternum; congestion, with difficult expectoration of tough, lumpy mucus; morning expectoration of yellowish, greenish lumps, even without coughing.

Mercurius.—Chronic, moist Cough, worse at night, with *purulent or muco-purulent sputum.* Roughness, burning, feeling of soreness, from fauces down to sternum, hoarseness. Dry, raw, concussive cough. Catarrhal headache, Coryza, Diarrhœa, fever, night sweats which give no relief; sputum ropy, watery, sanguineous, sweetish, saltish, putrid.

Nux Vomica.—Grating, scraping, with irritation in the throat: heavy, tough, mucous expectoration. Headache as if bruised. The cough is worse early in the morning. "Stomach cough" coming on after meals.

Phosphorus.—Harassing cough, *abrupt,* rough, sharp, dry; an interval occurs between each effort (unlike *Drosera*). The patient is not compelled to sit up, nor does the attack always end in expectoration. It is particularly useful in *laryngeal coughs,* and in *bronchial Asthma,* in coughs complicating Typhus and Enteric Fevers, Pneumonia, Emphysema, and Tuberculosis. Dry Cough, excited by tickling in the throat. *Hoarseness* and pains or soreness in the chest. Sputum is frothy, sticky, purulent, saltish, brown, rust-coloured, or bloody. Talking, laughing, eating, or moving, causes aggravation.

Pulsatilla.—Mucous *râles.* Accumulation of mucus giving rise to asthmatic difficulties. Dry, tickling cough at night on lying down. *Moist diurnal cough;* the cough is better out of doors: useful for women and children.

Rumex.—Dry Cough worse from cold air; patient covers up head to exclude it; soreness under the breast-bone. Cough worse in morning, with titillation of the nares, trachea, or bronchial tubes, particularly if there be thin, brownish diarrhœa.

Senega.—Tough mucus, dislodged with difficulty. *Torpid conditions of the laryngeal mucous membranes* in the aged. Emphysema, senile Asthma, chronic cough, and old Pneumonia. These states are greatly relieved by the administration of *Senega.*

Sepia.—Valuable in the dry, short cough of Tuberculosis. Titillation in the larynx, dryness in the chest and larynx. The cough is dry, hollow, and deep, better on lying. Dr. Hirschel says, "*Sepia* is, next to *Calc.*, my chief remedy in Tuberculosis."

Spongia.—Specially useful at the commencement of *Croup.* Its indications are, *whistling*, abrupt, dry, sharp, barking cough, both night and day. It is peculiarly prompt in its action in the inflammatory stage. *Laryngeal* cough with tickling. Hoarseness and Aphonia.

Stannum.—Chronic moist cough, with purulent, profuse, green, sweet-tasting sputum, with *night sweats.*

Sulphur.—*Obstinate* dry cough, with tightness in the chest, and retching; loose cough, with expectoration of whitish or yellowish mucus during the day, and dry cough at night attended with headache, spitting of blood, etc. Cough following the disappearance of eruptions. Should be used for resolving hepatizations, and when there is a *dyscratic* element in the case.

Veratrum.—Impulsive cough, sense of constriction in the throat; useful in Influenza, in stomach cough, *spasmodic cough*, and *Pertussis.*

Cepa., Ambra, Amm. C., Bismuth, Coral., Lob., Scilla, Verbascum, and Viola O. are also useful.

The *Sulphurous Acid Spray* has been found eminently beneficial in many cases.

Beverages.—Gum-water, barley-water, linseed-tea, and other mucilaginous drinks; or, if preferred, small quantities of cold water, at frequent intervals.

Preventives.—Cold bathing or sponging the whole surface of the body every morning, as directed under Bathing (Sec. 13). Cold compresses to the throat or chest afford relief (see Sec. 33). Clothing adapted to the varying conditions of the atmosphere (see Sec. 12). Exercise, every day in the open-air, if possible in the country. Familiarity with a free atmosphere affords a security against excessive sensitiveness to variations of the weather. *Morning* air is best; damp, confined air, or that of crowded assemblies, should be avoided.

Arrest.—Dr. Brown Sequard states that nervous Cough may be checked by pressure on the nerves of the lip in the neighbourhood of the nose, or near the ear, right in front, or very hard on the top of the mouth inside, or by a *strong exercise of the will.*

CHAPTER IX.

Diseases of the Digestive System.

152.—Stomatitis—Inflammation of the Mouth.

Symptoms.—Fœtid breath, painful swelling of the tongue, cheeks, gums and palate; patches of redness on the lining of the mouth, which are sore, and from which an exudation takes place.

Causes.—Exposure of badly-nourished children to cold; gastric derangement; Measles or other eruptive fevers; or the introduction of hot and acrid substances into the mouth.

Treatment.—*Kali Chloricum.*—Fœtid breath, great soreness, and Ulceration of the mucous surfaces of the tongue, palate, and cheek. We generally administer the 1x trituration. This remedy may also be used as a wash for the mouth: eight grains of the *Chlorate of Potash* to four ounces of water.

Mercurius.—Abundant *salivation;* swelling of glands.

Ac.-Nit.—When concurrent with portal Congestion, and the ordinary symptoms of *biliousness.*

China.—To *invigorate* the patient when the Ulcerations are healed.

Hydrastis.—Is indicated by yellow tongue, stickiness in the mouth; employed as a wash several times a day.

Tannic Acid Gargle.—If used early, the affection is often immediately suppressed by a wash of *Ac.-Tannic* (℥j ad aq. ℥viij.

Additional remedies are *Arum. T., Nat. Mur., Caps., Mur.-Ac., Rheum.*

The *Sulphurous Acid Spray* with the help of *Sulph.* and *Hep.-S.* has rendered important service.

Accessory Means.—The cause should, if possible, be removed, and if stomachic, the diet corrected. As a rule, the patient's diet should be restricted for some time to milk, or milk-and-soda-water, in equal proportions, which is both nourishing and digestible, and may be taken without adding to the patient's discomfort. Afterwards chocolate or cocoa may be gradually substituted, and continuously used instead of tea for the morning or evening meal. Good animal broths are also generally required as the disease declines.

153.—Thrush (*Aphthæ*)—Frog—Sore Mouth.

Definition.—An inflammatory fungoid product, consisting of numerous minute vesicles terminating in white sloughs on the surface of the mouth. The concretions are due to cryptogamic vegetation (*oidium albicans*), the sporules of which increase with great rapidity, and form tubular fibrils. Their appearance indicates an acid condition of the buccal secretions, which is normal in the young infant, and accounts for the greater liability of infants than adults to this affection. It also accounts for its frequency in foundling hospitals, where it proves infectious.

Symptoms.—Small vesicles or white specks appear upon all parts of the lining membrane of the mouth and are sometimes

so connected as to form a continuous covering over the tongue, gums, palate, and in bad cases even extending to the fauces and gullet; feverishness; pain on swallowing. The neighbouring glands are sometimes swollen and tender. Extension of the disease to the bowels, dark-coloured eruption, and violent Diarrhœa, may arise in severe cases.

In children, this deceptive complaint, if neglected or badly treated, becomes dangerous; the little patient, put into his crib at night, may be dead before morning.

Causes.—A delicate or strumous constitution; *imperfect nutrition; artificial feeding;* insufficiency or unhealthy condition of the mother's milk; or, in infants who are fed by hand, an unsuitable quantity or quality of food; acid secretion in the mouth; want of cleanliness; bad drainage, etc. Hot weather, bad milk, a dirty bottle, a close, unwholesome nursery, slops unemptied, windows never opened, damp linen drying by the fire; these are conditions which induce Thrush. Sometimes Thrush occurs during the course of Measles, Enteric fever, Consumption, and in the diseases attendant upon old age, when it forebodes an early fatal termination, because it is then a sign of enfeebled vital energy.

Treatment.—*Borax* has a specific power over this affection, and will alone cure it if limited to the mouth. The mouth may also be washed with a weak solution of *Borax* (four grains to one ounce of water), in which three or four drops of strong Carbolic acid are mixed, by means of a soft brush. Or *Borax* and *Glycerine* may be used, half a dram of the former to one ounce of the latter. The infant will swallow sufficient for a dose each time the solution is used.

Mercurius.—Offensive breath, *dribbling saliva,* Diarrhœa, gangrenous Ulcers, etc. If administered when the white vesicles first appear, it is often sufficient alone.

Arsenicum.—Extension of the eruption to the stomach and bowels; *dark-coloured eruption,* having an offensive odour; *exhausting Diarrhœa.*

Sulphur may follow *Ars.* or any other remedy that does no further good; also when Thrush has nearly subsided, to prevent a relapse; and when there are eruptions of the skin.

Ant. Tart., *Bry.* or *Nux V.*—Gastric derangement, dryness of the mouth, white or yellow mucus on the tongue.

General Treatment.—Strict cleanliness, good ventilation, abundance of fresh, out-of-door air, and suitable diet. Each time the child is fed, all remains of milk or other food should be removed, the mouth cleansed with cold water or a piece of fine linen rag, and the child allowed to suck a rag wetted with a solution of *Sodæ Hypo-sulph.* in cold water, so given that the rag may not be drawn altogether into the mouth. Emollient fluids—infusion of linseed, thin solution of borax and honey, etc., are grateful and useful. *Permang. Pot.*, *Chlorate of Potash*, *Vinegar*, *Carbolic acid*, *Sulphurous acid*, etc., diluted with water, are also recommended as local applications or gargles, to cleanse the affected surfaces. *Sulphurous acid* is best applied by means of the *spray-producer*, in the proportion of one part of acid to ten parts of water; it should be continued for two or three minutes, and repeated once or twice a day. If the sore mouth be due to ill-health in the mother, the child should be at once provided with a wet-nurse or weaned. In the latter case, if under three months old, the child should be fed with *Sugar-of-Milk*, or if more than three months old, with *Neave's farinaceous food*. See Section 26.

154.—Offensive Breath.

In perfect health, the odour of the breath is sweet and agreeable: on the contrary, fœtid breath is usually a concomitant of disordered digestion, Scurvy, malignant sore throat, etc.; it is also disagreeable and infectious during the progress of the eruptive, enteric, and pestilential fevers; but in no disease is it more offensive than in *Gangrene* of the lung; indeed that condition may be recognised by this symptom alone. Sometimes offensive breath arises from neglect of cleansing the mouth and teeth after meals.

Treatment.—*Carbo Veg.*—Putrid odour of the breath from decayed teeth, bad condition of the gums, large doses of *Mercury*, or other causes. A dose thrice daily, for eight or ten days, or as long as may be necessary.

Hep.-S. or *Ac.-Nit.* may follow, especially when *Carbo Veg.* is insufficient, and when the fœtor results from previous mercurial salivation.

Spigelia.—Offensive breath, perceived only by others, with much white or yellow mucus in the mouth and throat; the back part of the tongue is painful, and feels swollen.

Mercurius.—Fœtid breath from a sore or aphthous mouth.

Nux Vom. or *Puls.*—From Indigestion.

Aur. or *Puls.*—Females advancing towards puberty.

Sulphur, morning and night for a week, may follow any of the preceding remedies, and complete the course.

Arn. and *Petrol* have also been found beneficial.

Accessory Means.—General attention should be given to diet, the use of water, pure air, regular out-of-door exercise, bathing, and such other hygienic means as are indicated in the first chapter of this volume. Animal food should only be eaten in moderation; and the teeth and mouth should be carefully cleansed at least twice a day. *Perfumed Carbolic Acid*, diluted with water, makes an excellent wash for the mouth, for patients troubled with fœtid breath.

155.—Cancrum Oris (*Gangrena oris*)—Canker of the Mouth.

Definition.—A sloughing or gangrenous Ulcer of the mouth, occasionally occurring in ill-fed, tuberculous children, from two to six years old, especially those who live in low, damp situations.

Symptoms.—The Inflammation generally begins at the edges of the gums opposite the incisors of the lower jaw; the gums are white, spongy, and separate from the teeth, as if *Mercury* had produced its specific effects. Ulceration begins and extends along the gums until the jaws are implicated; and as the disease advances, the cheeks and lips swell and form a tense indurated tumefaction. The teeth are then apt to fall out; and as the parts acquire a gangrenous condition, the breath becomes intolerably fœtid. There is generally enlargement and tenderness of the submaxillary glands. In

severe forms of the disease, the destructive process rapidly extends, so that in a few days the lips, cheeks, tonsils, palate, tongue, and even half the face, may become gangrenous, the teeth fall from their sockets, and horribly fœtid saliva and fluid flow from the parts. It frequently supervenes on Rubeola. The disease appears to have a close connection with a tendency to consumption of the lungs or bowels, and then not unfrequently proves fatal. In *post-mortem* examinations, tubercles have been invariably found when death has resulted from this disease; hence, Dr. Ketteridge, of New York, concludes that it can only arise in children of a tubercular diathesis.

Treatment.—Merc. (*often specific in cases not caused by Mercury*); Ac.-Mur. (*Canker associated with severe disease—Measles*, etc.); Ac.-Nit. (*from excessive doses of Mercury*); Ars. (*extensive disorganisations, extreme prostration*); K.-Chlor., Hydras.

General Treatment, the same as prescribed in the preceding Section. Strong beef-tea, raw eggs beaten up in milk, and cod-liver oil, are often necessary. See Sections 26 and 29. Also a lotion of *K.-Chlor.*, *Hydras.*, *Calc. Chlor.*, or *Ac. Mur.*

156.—Teething (*Dentitio*).

Physiology.—There are two sets of teeth; the first—the milk-teeth—appears during the early period of life, and falls out in the seventh or eighth year, to be replaced by the permanent set, which is not completed till the commencement of adult life. The order in which the milk-teeth appear is generally as follows:—About the sixth month the two middle incisors of the lower jaw are cut, followed in a few weeks by the corresponding incisors of the upper jaw; next appear the two outside incisors of the lower jaw, and soon after, those of the upper; after another interval of perhaps about two months, the first four molars, then the eye teeth, and, lastly, four other molars, completing, by about the second year, the teeth of the first set. Should there be any little deviation

from this order, or should dentition be a little prolonged, no great importance need be attached to it.

Dentition being a natural process in the development of the child's organism, should certainly not be regarded as in itself a disease, still less a dangerous one. Notwithstanding, in feeble, strumous children, the period of teething is a trying one, and in some instances may be even dangerous.

Disorders.—The increased activity and excitement in the vascular system, combined with the nervous irritation which sometimes attends Dentition, may, in delicate or strumous children, give rise to a greater or less amount of local or constitutional disturbance. Rickets greatly influence the progress of teething. If this disease sets in previously to the commencement of Dentition, the evolution of the teeth may be almost indefinitely delayed; or, if some are already cut, further progress may be arrested. Rickety children of eighteen months or two years old may often be seen with very few teeth, and those few black and carious. In Tuberculosis and congenital Syphilis, on the other hand, the teeth are cut early, and before the frame is sufficiently consolidated to sustain the necessary changes.

But, as in too early Dentition, the constitution is rarely sufficiently strong to sustain the changes it has to undergo; so in late Dentition there is a languid condition, indicative of a scrofulous constitution.

Symptoms.—Irritation in the mouth, swollen or tender gums, and increased flow of saliva; starting as if in fright, or interrupted sleep; sudden occurrence of febrile symptoms; various eruptions on the head or body; cough, with wheezing breathing; derangement of the digestive organs—Diarrhœa, sickness, or Constipation; and sometimes Spasms and Convulsions.

Causes.—Strumous constitution; Rachitis. The exciting causes are *irregular* feeding; *excessive* feeding; *improper quality of food;* disordered Dentition is often coincident with a change of diet from the mother's milk to various articles which are unsuited to the age of the child; keeping the head too hot; too little out-of-door air; exposure to sudden changes of temperature. By such means the stomach is disordered,

the nervous system disturbed, and restlessness, crying, Colic, and even Convulsions follow. In nearly every case these causes may be avoided, and the sufferings reduced to a minimum, even in strumous constitutions.

Local affections of the gums, as inflammation; or disproportion between the jaw and the number and form of the teeth, are also causes of suffering.

Not a few cases of disordered Dentition are referable to the condition of the mother. Worry, fits of anger, overheating, fatigue, etc., may so poison the blood of the mother, that, unless the milk be withdrawn until physical and mental calm be restored, Convulsions, Fever, Diarrhœa, or even sudden death, may result.

Epitome of Treatment.—

1. *Feverishness*, etc.—Acon., Cham. (*fretfulness; one cheek pale, the other flushed*).

2. *Diarrhœa.*—Cham. (*sudden starts; pinching-pains; slimy or yellow, sour-smelling, offensive motions*); Merc. (*green or bloody*); Coloc. (*Colic*); Podoph. (*paroxysms of pain, with Prolapsus Ani*); Bell. (*nervous irritability, flushed cheeks*); Calc. *or* Sulph. (*scrofulous children*); Ars. (*with emaciation*).

3. *Constipation.*—Bry., Nux V., Sulph., Acon., Plumb.

4. *Sleeplessness, etc.*—Coff. (*nervous excitability*); Bell. (*flushed face*); Gels. (*simple wakefulness*); Kreas. (*agitation*).

5. *Convulsions.*—Bell., Cham., etc. See Section 93.

6. *Irregular Dentition.*—Calc.-C. (*too early or late*); Ac.-Phos. (*excessive weakness; rachitic constitution*); Sil. (*perspirations about the head*); Kreas. (*thin, irritable children; early dental decay*); Merc. Sol. (*soreness of the gums*). Also the use of lime-water.

Chamomilla.—Bilious Diarrhœa, with intestinal irritation, fretfulness, restlessness, disturbed circulation; cough with wheezing.

Calcarea.—Valuable for scrofulous children, as a corrective of constitutional weakness; also in cases complicated with slimy or mucous Diarrhœa. This remedy is most useful between acute attacks.

Calc. Phos.—Pale, flabby children, irritability and wakefulness, teeth decaying as soon as cut.

Accessory Treatment.—*Regularity in the times of feeding and sleep;* correction of any habits in the mother which may affect the child unfavourably; restriction to *suitable quantities* of food at one time. The food should not be changed while there is dental irritation, but in the intervals between the cutting of teeth. *Keeping the head cool* and the feet warm, washing the child daily in cold water, and allowing it to be much in the open-air, tend to prevent determination of blood to the head. *Neave's Farinaceous Food*, prepared according to the directions supplied with it, is generally the best artificial diet for children. But when the teeth have appeared, employment should be given to them, and the child encouraged to nibble and bite crusts, biscuits, and bones. Purgatives are to be strictly avoided. Costiveness in children is generally due to errors in diet; if obstinate, or if worms are present, injections of water may be used.

157.—Toothache (*Odontalgia*).

Causes.—Decay is the most common *predisposing* cause; sudden change of temperature, derangements of the digestive organs, pregnancy, and general bad health, are the most frequent *exciting* causes. When the cavity of a tooth has been exposed by caries, the dental pulp is extremely liable to pain from contact with food, liquids, or atmospheric air; and if the health be much impaired, or the central pulp greatly irritated, acute Inflammation, with extreme pain, may result.

Neuralgic Toothache occurs in paroxysms, which come and go suddenly (see Section 95).

Treatment.—If *Kreasote* or *Laudanum* have been used as a local application, the mouth should be thoroughly cleansed before taking any of the following medicines. After three or four doses of any medicine have been administered without mitigating the symptoms, another should be selected.

Epitome of Treatment.—

1. *From cold or chill.*—Acon., Bell., Cham., Dulc., Merc., Glon.

2. *From decayed teeth.*—Kreas., Staph., Bell., Merc., Sil.,

Ant.-C., Phos., Nux V., Acon., Merc. Camphor is said to cure the pain and arrest decay.

3. *From Indigestion.*—Bry., Nux V., Puls., Merc.

4. *Nervous.*—Bell., Cham., Nux V., Coff., Ign., Ars.

5. *Rheumatic.*—Cham., Merc., Cimic., Bry.

6. *In children.*—Acon., Cham., Bell., Sil.; Cin., Spig., *with worm symptoms.*

7. *In women.*—Puls., Chin. (*before menstruation*); Cimic., Cham., Bell., Ver.-Vir. (*at the time*); Bell., Nux V., Coff., Cham., Calc. C., Sep., Kreas. (6x), Cimic., Merc. V. (*during pregnancy*).

8. *Preventives.*—Ars., Kreas., Merc., Phos., Sil., Euphor., Staph.

Modifying Conditions.—

Pain better in the open air, Ant.-C., Bry.

Pain better from cold, Ant.-C., Coff., Puls., Phos., Staph.

Pain better from warmth, Ars., Nux V.

Pain better from rest, Phos., Staph.

Pain worse in open air, Rhus, Phos.

Pain worse from cold, Acon., Ars., Ant.-C., Cin., Magnes.-C., Rhod., Bell.

Pain worse from cold water, Ant.-C., Arg.-Nit., Cin., Spig., Staph.

Pain worse from warmth, Ant.-C., Bary.-Carb., Bry., Cham., Rhus.

Pain worse at night, Bell., Ant.-C., Colch., Coffea, Cycla., Merc., Puls., Phos.

In hollow teeth, Kreas., Merc., Ant.-C., Spig., Staph., Cham.

With bleeding gums, Bary.-Carb., Carbo Veg., Merc.

With decaying teeth, Euphor., Kreas., Merc.-V., Rhus, Staph., Bell., Ant.-C., Phos., Nux V.

With pains extending to temples, Caust., Kreas., Mez., Merc.

With jumping pains, Bell., Gels., Hyos., Spig.

With fistulæ in gums, Ac.-Fluor., Silic.

With headache, Bell., Glon., Hyos., Mez., Puls.

Neuralgic toothache, Ars., Cham., Sulph.-Quin.

Teeth feel too long, Bell., Bry., Caust., Hyos., Mez., Sulph., Acon., Cham.

Leading Indications.—

Acid. Fluoricum.—*Fistulæ* about the teeth and gums. The teeth are extremely sensitive.

Aconitum.—Toothache from *cold;* acute, stinging, or hard-aching pain, *relieved temporarily by cold water;* throbbing, heat of the face, and sometimes chilliness, but not the mental confusion and sensitiveness to noise, light, etc., which indicate *Bell.* A drop or two of the strong tincture from the root or of the first dilution, applied to the tooth by means of a piece of lint, will sometimes promptly relieve this kind of Toothache.

Antimonium Crudum.—Aching in hollow teeth, worse at night, from eating, and from drinking cold water. The pains are better in the open air; but stitches occur in the teeth when cold air is being inspired (compare *Cin.*). It has been found useful in toothache occurring regularly every evening.

Arnica.—Pains due to *injury*; throbbing toothache; pain in the teeth as if they were being scraped. Pain consequent on *extraction* or other dental *operations;* the mouth should be rinsed with a mixture of one part of the strong tincture to about ten of water.

Arsenicum.—Spasmodic grinding of the teeth; pains worse by touching, or lying on the painful side; by rest and cold; better on moving and applying warmth. Unbearable *jerking pains, coming on or aggravated at night. Neuralgic toothache,* pains quickly producing exhaustion. This remedy may be continued for some time after the cessation of pain, to prevent a recurrence.

Apis.—With much swelling.

Baryta Carb.—Boring in the teeth, when warm or cold substances are placed in the mouth. Toothache *worse from contact with warm food.* Bleeding of the gums (also *Carbo Veg.*).

Belladonna.—Shooting, throbbing pains, affecting several teeth on one side, so that it is impossible to point out the exact tooth; the pains shift about, and are increased by contact of the teeth or by warm or cold applications; lancinating pain on the left side—first in the ears; then in the teeth; then in the face—not much felt while eating; worse after eating, and at night. Digging toothache; the front teeth feel too long. Determination of blood to the head, *flushed face,* excessive *sensitive-*

ness to external impressions, noise, light, etc., swelling of the cheek or glands, dryness of the mouth and throat, mental confusion. Dr. Hughes recommends it for "the burning, throbbing misery of inflammation of the dental pulp."

Bryonia.—Toothache worse from warmth; pain as if the tooth were being screwed into, and afterwards taken out of its socket (compare *Staph.*). The pain is momentarily relieved by cold water; more permanently by walking in the open air. The pain is less when the patient lies on the affected side (compare *Ars.*); when chewing, teeth feel too long. The pains sometimes shift from decayed to sound teeth.

Calcarea Carb.—Toothache worse from taking hot or cold things into the mouth.

Carbo Veg.—Toothache from salt food; the *gums bleed* and recede from the teeth.

Causticum.—Painful *elongation* of the teeth. Pain extends over temples and into forehead, or to the eye and ear. Painful sensation of looseness.

Chamomilla.—*Violent paroxysms* of toothache from a draught, or *suppressed perspiration*, and affecting the ear; *neuralgic toothache, causing extreme agony;* the teeth feel long and loose; the cheeks and gums are swollen, but the skin is not very red; and the pains are aggravated by eating or drinking, especially by warm food or drinks; and by the warmth of bed. It is suited to *children during teething*, with watery, greenish, fœtid diarrhœa. Redness of one cheek and paleness of the other.

Cina.—Inspiration of air, and cold drinks affect the tooth painfully (compare *Ant.-C.*).

Coffea.—Restlessness; the pain is temporarily relieved by cold. Toothache accompanied by darting and restlessness; and when the pain is worse after a meal, and at night.

Colchicum.—Lacerating pains in the gums; pains worse at night; sensitiveness to pressure.

Cyclamen.—Dull, drawing toothache, lasting the whole night. Tearing pain in the three left molar teeth, as if they were being torn out.

Euphorbium.—Toothache increasing when teeth are touched, or during mastication (compare *Cham.*). It is useful when the teeth are liable to crumble and break off.

Glonoine.—Pulsating toothache with *headache;* after being over-heated and taking cold.

Hepar Sulphur.—Decay of teeth, and easily bleeding gums, from abuse of *Mercury*. *Carbo Veg.* and *Ac.-Nit.* are also useful.

Hyoscyamus.—The gums feel swollen; lacerating toothache, with determination of blood to the head; the teeth feel elongated and loose. Lacerating in the gums, increased by cold air. Jerking pain in a hollow tooth, extending over temple.

Kreasotum.—Drawing pains in the teeth, extending to the temples; red, painful gums; offensive breath. This remedy, in the higher dilutions, is very valuable in *toothache from caries* (compare *Merc.*). *It not only gives relief, but also tends to arrest decay.*

Magnes.-Carb.—Toothache, with drawing pain in the direction of the temples; toothache after eating, worse at rest, and from cold. The teeth feel loose and elongated. Tearing, boring, and pricking sensations, worse at night, forcing the patient to rise.

Mercurius.—The leading remedy. In the 3 or 3x trituration, extremely useful for toothache depending upon *caries.* Violent scraping or lacerating pain in the cheek-bones, or boring, tearing, gnawing pains, aggravated by eating, and also at night in bed; momentarily relieved by cold water. Pains affecting the *entire side of the face*—extending to the temples, glands, and ears. Toothache with *Salivation* (not caused by *Mercury*); profuse perspirations in bed, which do not afford relief. When toothache is directly due to a hollow tooth, a grain of the trituration may be placed within the cavity. *Merc.* should not be lost sight of in the toothache of pregnancy (if a decayed tooth is painful), but *Mag.-Carb.*, *Sepia*, *Sabina*, and *Secale* have special claims on our attention under these circumstances.

Mezereon.—This remedy acts upon the *periosteum of the sockets* of the teeth; the pain extends into the malar bones and temples. The teeth seem elongated, and are painful on being touched.

Nux Vomica.—Darting pain in the teeth, and twitching in the ear, morning and evening. Toothache after dinner; boring, gnawing toothache, better on inspiring air (compare

Ant.-C. and *Cin.*), and from warmth; *worse from mental exertion.*

Phosphorus.—Tearing, shooting pains; worse in the open air, or from warm food. In toothache from decayed teeth and accompanied *with gum-boils*, it will be of service.

Pulsatilla.—Toothache comes on as soon as anything is taken into the mouth; it is often attended with chilliness, congestion, and pain in the head. Drawing toothache, as if the nerves were put upon the stretch and let loose again suddenly. The *pain is worse in the evening, at night, and from warmth.* Better from cold.

Rhododendron.—Toothache excited by rough, cold, and damp weather.

Rhus Tox.—Useful against caries of the teeth, especially against the form known as "Crusted Caries." Looseness of the teeth, lacerating toothache at night; worse in the open air; relieved by warmth (compare *Puls.*).

Silicea.—Suppurations about the sockets of the teeth. Toothache from warm food; tearing, stinging in the teeth, preventing sleep.

Spigelia.—Darting pain through all the teeth; most violent in the decayed ones. *Painful jerks* in a decayed tooth, *aggravated by cold water.*

Staphysagria.—The teeth *blacken* rapidly. Lacerating pain in the gums, while eating or taking cold drink. Toothache specially attacks *hollow teeth.* Teeth feel long. Sensation when chewing as if the teeth were pressed more deeply into the gums.

Sulphur.—Toothache in the open air, or from draught; the teeth feel elongated; the pain chiefly affects the left side; the teeth feel loose when eating.

Plantago.—If indications for another drug are not clear.

Administration.—Every fifteen or twenty minutes till the pain is mitigated; afterwards every four or six hours.

The *Sulphurous Acid Spray*, or a plug of lint dipped in the Acid or *Chloroform* and inserted in the tooth, will often give immediate relief.

Electricity.—A continuous current of electricity through the affected side of the jaw may give temporary relief. The

negative pole should be applied to the anterior lateral portion of the neck, and the positive held over the painful tooth. A mild current for two or three minutes generally suffices.

Stopping Carious Teeth.—If the caries be recent and slight, the decayed portions should be removed, and the cavity filled with a suitable material by a skilful dentist. If the patient be suffering from Toothache, the pain should be removed before stopping. When it is not practicable to have a tooth stopped by a professional dentist, its cavity should be cleaned and filled with white wax, which, by excluding the atmospheric air and the irritation of food, retards the progress of decay. But a better and more durable stopping for non-professionals is the prepared *gutta-percha*, which, if carefully introduced, after thoroughly cleaning out the affected tooth, may preserve it for years. Dr. Ringer recommends a jelly made of equal parts of *Collodion* and *Carbolic Acid*, to be used as a "stopping" for hollow teeth.

Extraction of Teeth.—In some cases the only remedy for Toothache is *extraction;* this is especially the case if the decay has proceeded so far as to blacken the tooth, rendering it loose and useless for mastication, prejudicial to neighbouring teeth, and a cause of offensive breath. If there be a suppurating abscess at the root of the tooth, or periodical swelling of the gums, extraction is necessary. On the other hand, in a large majority of cases, considerable experience justifies us in stating that the most distressing cases of Toothache are promptly cured by homœopathic remedies. Our advice therefore is, never extract a tooth merely because it aches, or has *begun* to decay; skilful treatment is usually sufficient to remove the pain; and, subsequently, local and general measures may prevent a recurrence of the trouble.

Means of Preservation.—The function of the teeth is so important that their preservation is a matter of the highest moment. The teeth should be kept clean by rinsing the mouth with pure cold water, and brushing the teeth with a moderately *soft* brush every morning; and, if possible, after every meal, especially when animal food has been taken; and contact with all disorganising agents avoided. The idea that frequent brushing tends to lacerate the gums and separate

them from the teeth is erroneous, for it is one of the best methods of restoring them to a healthy condition when they are spongy and liable to bleed. But when a tendency to decay of the teeth or inflammatory action of the gums exists, a dilute solution of *Carbolic Acid*, *Myrrh*, or other dentifrice, should be regularly and continuously used. The habit of taking very hot substances into the mouth should be avoided, as the expansive power of heat may rupture the enamel, which in turn becomes the nucleus of decay. On the other hand, the habit of subjecting the teeth to the opposite extreme of temperature, as by sucking ice, etc., is also to be avoided. Chewing or smoking tobacco, and the habitual use of strong drinks, tend to destroy the teeth. Lastly, as an important means of preserving the teeth, the general health should be maintained in the highest state of integrity, by the use of plain, nourishing food, cold bathing or sponging, and early and regular habits.

158.—Gum Boil (*Abscessus Alveolarus*).

Definition.—A small abscess commencing in the socket of a tooth, and bursting through the gum or even through the cheek.

Causes.—Usually, the irritation from a decayed tooth. A cold may excite Inflammation of the dental periosteum, the morbid products of which are thus discharged.

Symptoms.—Pain in a tooth, spreading over a portion of the jaw, with heat, throbbing, swelling, and the formation of an Abscess. This may heal by resolution: or it may burst into the mouth, or even percolate the cheek. The sufferings are sometimes great, worse at night, and incessant till swelling has taken place, when it usually abates. There is frequently some febrile disturbance.

Treatment.—*Mercurius.*—Constant aching, much *Salivation*, swelling of the gum, and throbbing. Persons who are liable to Gum-boils should continue the use of this remedy as a preventive twice a day for *a week or two.*

Aconitum.—In alternation with *Merc.* for *feverishness.* Prescribed early, *Acon.* checks the disease at the onset.

Belladonna.—Throbbing Headache, flushed face, and *sensitiveness* to noise, light, etc. Two or three doses may suffice.

Phosphorus.—An excellent remedy for Decay of the teeth of the *lower jaw*, and when Gum-boils form therefrom.

Hep.-S.—When the swelling *softens and throbs*, indicating the formation of matter; *Silic.*, when the abscess has burst.

Sulphur.—Gum-boils only partially cured by the above remedies; also when they tend to recur.

Accessory Treatment.—The application of a roasted fig, as hot as can be borne, to the inflamed gum will speedily give relief. If the swelling be very extensive, and there are signs of the Abscess coming through the cheek, a poultice of linseed-meal should be applied till suppuration is established, and continued for a short time afterwards. In some cases, prompt relief may be obtained by lancing the swelling as soon as its existence is ascertained. Extraction of the decayed tooth is often necessary.

159.—Glossitis (*Glossitis*)—Inflammation of the Tongue.

Symptoms.—Heat and pain in the tongue, which rapidly swells, sometimes to an enormous size, so as to hang out of the mouth; profuse Salivation; enlargement of the tonsils, felt externally, and painful to the touch; face red and swollen; the patient may even be unable to eat, swallow, or speak; and suffocation seems imminent.

Causes.—Cold; wounds of the tongue; depreciated health or, more frequently, mercurial Salivation.

Treatment.—*Aconitum* and *Mercurius* in alternation every hour, for *non-mercurial* Glossitis, till relief is obtained. If the disease be due to large doses of Mercury, *Bell.* should be alternated with *Hep.-Sulph.* *Ac.-Nit.*, *Canth.*, *Merc.-Viv.*, and *Carbo V.* are also useful. If there be much œdematous swelling, *Apis* should be selected.

160.—Ulcer on the Tongue (*Ulcus Linguæ*).

Symptoms.—Soreness, slight swelling, and redness of the tongue; small Ulcers form, and discharge pus.

Fissures or Cracks sometimes appear upon the side of the tongue, generally opposite the molar teeth, from Indigestion or the irritation of stumps.

Treatment.—*Mercurius Biniod* (2x) is generally the best remedy, except for patients who have been overdosed with *Mercury*. In the latter case, *Ac.-Nit.*, both internally and as a gargle, should be prescribed. *Ac.-Mur.*, recurring ulcers; *Lyc.*, ulcers under the tongue. *Hydrastis* is also a valuable remedy; a low dilution may be taken, and the strong tincture used as a wash for the mouth (four or five drops to a wineglass of water). As a local remedy, dilute *Carbolic* or *Nitric Acid* is alone of great service (five drops to half a tumbler of water) for rinsing the mouth several times a day.

161.—Tongue-Tie (*Lingua frænata*).

Definition.—A condition of the tongue in which the *frænum linguæ* is shorter than usual, and extends forward to the tip of the tongue, thus confining it to the lower jaw.

This condition is by no means common, and frequently only exists in the imagination of the mother. But when it is found, the child is unable to raise the organ to the palate, so as to produce the necessary vacuum, and sucking is consequently seriously impeded. If on examination, by raising the point of the tongue, the frænum should prove to be thick and short, it will be necessary to divide it. The infant should be made to cry, and then the frænum will be fully exposed. The tip of the tongue shall be pressed upwards, and with a pair of round-ended scissors the membrane should be severed as little as possible. The points of the instrument should be directed downwards, keeping as close to the lower jaw as possible, that the arteries and veins may be avoided. The severance of these constitutes the danger of the operation; as in some cases serious and even fatal hæmorrhage has ensued.

162.—Sore Throat (*Dolor faucium*).

Definition.—Simple soreness or swelling of the throat, uncomplicated by Ulceration, Quinsy, or Syphilis.

Cause.—Catarrh; the Sore Throat being a simple extension of the catarrhal affection. This disease should not be neglected, as it is apt, in some persons, to degenerate into the troublesome form described in the next Section.

Treatment.—*Belladonna.*—Red throat, feeling as if scraped raw, with pain on swallowing.

Mercurius.—Sensation as of a lump in the throat, worse at night, sometimes accompanied by Salivation.

Aconitum.—Dryness, roughness, and heat in the throat, with a choking sensation, Hoarseness, and febrile disturbance. If given early, *Acon.* alone will prove rapidly curative in *catarrhal* Sore throat.

Baryta Carb.—If *Bell.* and *Merc.* are insufficient; and if the inflammation be *confined to the tonsils.*

Phytolacca.—Accumulation of mucus. It may be employed internally, and as a gargle or by inhalation.

Dulc.—If from a wetting, or from damp, foggy air.

Additional remedies are Naja, Iod., Lach., Hydras., Apis., Kali B., Alumina, Brom., Caps., Ign., Æsculus Hip.

Accessory Means.—Frequent draughts of cold water, and the application of the throat-Compress (see Sec. 33). Steaming the throat as directed under *Inhalation* (Sec. 37) is soothing and often curative, but it should be done at bed-time, when the patient has not again to be exposed to external air. (See also the following two Sections.)

163.—Relaxed Throat (*Resolutio Faucium*); Ulcerated Throat (*Fauces Ulcerosæ*); *and* Pharyngitis (*Pharyngitis*)—Clergyman's Sore Throat.

The affections designated by the above names, being of a similar nature, and requiring similar treatment, are included in this Section.

Pathology.—In the incipient stage, there is irritation of the lining membrane of the fauces and pharynx; afterwards,

Congestion, Inflammation, or relaxation of that membrane, enlargement of the tonsils, elongation of the uvula; and in its advanced stage, morbid deposit and Ulceration of the mucous follicles.

Symptoms.—The patient first complains of an uneasy sensation in the upper part of the throat, with a frequent disposition to swallow, as if something existed there which could thus be removed. If proper treatment be not adopted, the voice soon undergoes a change; it becomes feeble and hoarse, and sometimes, especially towards the evening, there is complete loss of voice. The patient complains of pain in the larynx, and makes frequent efforts to clear the throat of phlegm by coughing and spitting. On looking into the throat the parts are found to have an unhealthy appearance, being raw and granular; the mucous follicles are filled with a yellowish substance; a viscid muco-purulent secretion may also be seen adhering to the palate and adjacent parts.

Causes.—This condition is probably most frequently induced by the exercise of the organ of voice when in an inflamed state. An extension of the affection is almost certain to result from undue speaking during an attack of Sore throat or Hoarseness, as the muscles of the larynx lose their nutrition through diffusion of the morbid materials from the inflamed mucous membrane. The disease may also arise from an immoderate or irregular exercise of the voice, or it may follow inflammatory disease of the bronchial tubes or lungs, by much exercise of the voice before recovery has taken place. It is also occasioned by an unnatural style or tone of reading or speaking, as with preachers and military officers.

Epitome of Treatment.—

1. *For the incipient and acute stages.*—Acon., Bell., Merc.

2. *For the chronic form.*—Bell., Merc.-Iod., Calc.-Phos., K.-Bich., Arg.-Nit., Carbo Veg., Lach., Phyto.

3. *Clergyman's or Military Sore Throat.*—Phyto., Merc.-Iod., Arum, Arn. (*after excessive exercise of the voice*); Bell. (*Inflammation of the throat*).

4. *Occasional Remedies.*—Apis (*much œdema*); Ars. (*emaciated constitution*); Phos. (*consumptive tendency*); Sulph. (*as an intercurrent*); Arum (*Inflammation of tonsils*).

LEADING INDICATIONS.—

Belladonna.—Besides the symptoms mentioned in the previous Section, *Bell.* is well adapted to Ulcerated throat with bright redness, and *much pain* on swallowing.

Mercurius Iod.—Less pain than for *Bell.*, and chronic cases in scrofulous constitutions. Clergyman's or Military Sore Throat. Swollen throat; copious accumulation of saliva; swelling of the gums and of the tongue; shooting pain on swallowing; a disagreeable taste; fœtid breath; Ulcers on the side of the mouth; pains from the throat extending to the ear. Profuse perspiration, and nightly exacerbations, also point to *Merc.-Iod.*

Phytolacca.—Hoarseness and Aphonia, with great dryness, and feeling of lump in the throat. Cough with irritation as from an ulcer in the windpipe, also *Ign.*

Calc.-Phos.—In relaxed Sore throat this remedy is often used successfully, after others have been fruitlessly employed.

Kali Bich.—Accumulation of tough, stringy phlegm, requiring considerable effort to eject. Chronic ulceration.

Argentum Nitricum.—Ulcerated throat of a low type, with fœtid breath and foul mucus, and in cachectic patients. A weak solution of the drug may be used as a gargle.

Carbo Veg.—Similar conditions, with *Hoarseness.*

Lachesis.—Constant *irritation* in the throat, including much hawking, and a choking sensation: there is painful aching, but no deep-seated disorganisation, the affection being more of a nervous character.

Hepar Sulph.—In scrofulous constitutions not requiring *Merc.-Iod.* Also when the disease is consequent on the abuse of *Mercury.* *Ac.-Nit.* is also useful in this condition.

Gargle.—To correct the foul breath sometimes existing, a gargle of a weak dilution of *Condy's Fluid*, or of *Perfumed Carbolic Acid*, should be used. *Ac.-Acet. dil. cum melle* is a useful gargle.

The mineral waters of Ems are very frequently of service in Pharyngitis.

ACCESSORY AND PREVENTIVE MEANS.—1st. *Perfect Rest.*—The most important is to exercise a sore or inflamed organ as little as possible. The treatment of an inflamed larynx, like

that of an inflamed joint, should include a state of almost complete rest. As a preventive remedy in the case of clergymen, we would strongly urge the general adoption of Monday as a day of out-door recreation and cessation from all work; this will in some degree compensate for the great mental and physical expenditure involved in the discharge of the duties of the earnest minister of the gospel on the Sunday.

2nd. *The Throat Compress* (see Sec. 33).—When this is applied, the patient should retire to rest, and he will generally have the satisfaction of finding his throat difficulty much relieved in the morning. In more obstinate cases, the compress should be worn in the day-time, re-wetting it as often as necessary. When discontinued, the throat and chest should be bathed with cold water, followed by drying and friction. However often repeated, the compress never relaxes the throat.

3rd. *Cultivation of the Beard.*—The beard and moustache should be permitted to grow, as they afford an excellent protection to the throat, especially in the case of barristers, clergymen, public singers, and others subjected to the undue or irregular exercise of the organ of voice.

164.—Quinsy (*Cynanche tonsillaris*)—Tonsillitis (*Inflammatio tonsillarum*).

Definition.—Acute Inflammation of the tonsil or tonsils and subjacent mucous membrane, with general fever.

Symptoms.—It comes on quickly, with rapid swelling of one or both tonsils, severe throbbing pain, Hoarseness, and difficult swallowing and expectoration, occasioning a painful and almost constant effort to bring up and detach the viscid mucus which adheres to the inflamed surface; Headache; pain in the back and limbs; foul tongue; offensive breath; shivering, and general febrile symptoms. The morbid action generally extends to the *uvula*, which, becoming swollen and elongated, rests on the base of the tongue, and gives rise to an unpleasant sense of titillation. If the disease be promptly and skilfully met, the inflammatory symptoms subside in a few days, leaving the tonsils enlarged; otherwise suppuration

ensues, indicated by rigors, and throbbing, darting pains in the throat, extending to the ears. When the Abscess is fully mature, it ruptures, to the immediate relief of the patient. Often the Abscess forms in one tonsil, and after its discharge another forms in the other.

Chronic Enlargement and Induration of the Tonsils. —Repeated attacks of acute Inflammation, or attacks only partially cured, are followed by chronic enlargement and induration, causing difficult swallowing, hoarse voice, noisy and laborious breathing, especially during sleep, affections of the ears, arising from an extension of the disease along the mucous membrane, partial deafness, and extreme liability, from slight causes, to a frequent recurrence of acute Inflammation.

Causes. — The *predisposing* are — scrofulous constitution, abuse of *Mercury*, disorders of the digestive organs, and previous attacks of Quinsy. The *exciting* are—atmospheric changes, wet feet, etc. Quinsy is most frequent in plethoric persons, between fourteen and twenty, and for several years is liable to recur, unless preventive means are adopted.

Dangers.—Extension of the Inflammation to the uvula, soft palate, the salivary glands, pharynx, and particularly to *the root of the tongue*, with difficult breathing, etc. But early and skilful treatment usually prevents such complications.

Treatment.—*Aconitum.*—Feverishness, Headache, dizziness, and restlessness; stinging, pricking, fulness, or even choking, the throat looking as if scorched.

Belladonna.—Bright redness and rawness of the affected parts; flushed face, glistening of the eye, Headache, and pain and difficulty in swallowing. *Bell.* may follow or be alternated with *Acon.*

Hepar Sulph.—When matter has formed. It is especially useful in the scrofulous, in constitutions injured by *Mercury*, and when a liability to the disease has become established. Given sufficiently early, it often prevents suppuration.

Mercurius Iod.—Swollen throat; copious accumulation of saliva; swelling of the gums and of the tongue; shooting pain on swallowing; a disagreeable taste; fœtid breath; Ulcers on the side of the mouth; pains from the throat ex-

tending to the ear. Profuse perspiration, and nightly exacerbations, also point to *Merc.-Iod.* *Merc.-Cyan.* is also promptly curative.

Baryta Carb.—If given early, before suppuration can supervene, this remedy is said to disperse the engorgement; it is also useful in chronic Tonsillitis.

Lachesis.—Where the left tonsil is affected, and the mucous membrane is of a livid colour, etc.

Arsenicum.—Severe attacks, with much general *prostration*, the tonsils becoming putrid or gangrenous.

Nux Vomica or *Pulsatilla*, when *gastric* derangements cause, or are associated with, Quinsy.

Calc.-Phos., *Iod.*, *Bry.*, *Merc.-V.*, and *Plumb.-Iod.*, are also useful remedies.

Administration.—In acute cases, a dose every one or two hours; in sub-acute, every three or four hours; during convalescence, every six or twelve hours.

Accessory Means.—The constant *sucking of ice* during the commencement of an acute attack, moderates the heat and pain; it also checks the secretion of mucus, which gives rise to disagreeable and painful efforts to detach. In severe cases, ice may be employed in this manner till the disease has abated. (See Sec. 31.) When ice is not procurable, or when it is not admissible, as when it has not been adopted early in the disease, the next most effectual local application is the *steam of hot water*, and equally so whether the object be to bring about resolution or to facilitate the suppurative process. Steaming the throat assiduously acts as a fomentation, and removes the mucus from the crypts and follicles of the tonsils. (See Sec. 37.)

In some cases, a warm milk-and-water gargle, frequently used, will be found helpful and soothing. Further, in severe attacks, a hot poultice should be applied across the throat, extending nearly to each ear; in mild attacks, the throat-compress (see Sec. 33) may be used. The patient should remain indoors; and, in bad cases, in bed. The temperature of the apartment should be from 65° to 70°, kept moist by the evaporation of hot water from shallow dishes near the bed, care being taken that proper ventilation is preserved.

In *chronic enlargement of the tonsils*, the application of dilute tincture of *Iodine*, as a paint, is very useful.

Preventive Treatment.—Freely bathing the neck, jaws, etc., and gargling the mouth and throat every morning with cold water. After exposure to cold, especially if symptoms of Sore throat come on, the compress should be at once applied.

165.—Gastritis (*Inflammatio ventriculo*)—Inflammation of the Stomach.

Acute Inflammation of the stomach, except as a result of poisoning by some irritant, is a rare disease.

Symptoms.—Burning pain increased by pressure; constant thirst for cold drinks, with inability to retain either food or drink; constant nausea, coated tongue, and foul taste; dyspnœa, faintness, prostration, anxiety, etc.

Chronic Gastritis is indicated by dull pain and oppression soon after a meal, and sometimes vomiting of acid or mucus. The tongue is coated or red at the edges, and the patient often complains of heartburn, flatulence, thirst, burning of the hands or feet, confined bowels, and high-coloured urine depositing lithates, lithic acid, or oxalate of lime. It usually accompanies affections of the liver, heart, and kidneys, and is frequent in drunkards.

Causes.—Indigestion; cold draughts, damp, wet, etc.; cold drinks when over-heated; mechanical injuries; poisons—arsenic, vegetable acids, caustic alkalies, etc.

Epitome of Treatment.—

Acon. (*usually sufficient in simple Gastritis from cold*); Ars. (*burning; agonising distress; unquenchable thirst; wiry, quick pulse*); Ant.-C. (*thickly-coated tongue, nausea, eructations with taste of food*); Merc., Bry., Phos., Hydras., or Ars. (*chronic cases*).

Accessory Treatment.—In *acute* cases, small pieces of ice may be swallowed, and during the severity of the symptoms the patient should be fed by nutritious enemata. Fomentations to the stomach give much relief; so also do compresses. During convalescence, the patient must only gradually return

to solid kinds of food. On recovery, the stomach remains for some time feeble, and without due care is liable to atonic Dyspepsia.

In *chronic* Gastritis, the most important points are—attention to diet and general habits as recommended in the Section on "Dyspepsia." Cold water, the substitution of chocolate or cocoa for tea or coffee for the morning or evening meal, and a spare wholesome diet, are valuable adjuncts to the treatment.

166.—Chronic Ulcer of the Stomach (*Ulcus longum ventriculi*).

This disease is more common than is generally supposed, owing to its non-acute character, its giving rise to some of the symptoms of Chronic Dyspepsia, and its tendency, in about fifty per cent. of cases, to disappear spontaneously. It occurs twice as frequently among women as among men, chiefly during adult life, and is more common with the poor than with the rich. There may be one, two, or more Ulcers in the stomach.

Symptoms.—They are often not very clear; but there is generally pain, or a severe wearing or burning sensation, over the middle of the back, and in the stomach, the latter felt just below the breast-bone, of a dull, sickening character, and worse after food. If the Ulcer is on the anterior surface of the stomach, lying on the back relieves the pain; if on the posterior surface, leaning over a chair affords relief. Sometimes there are violent pulsations accompanying the pain, or Pyrosis, or vomiting of food and mucus, with relief to the pain; the patient loses flesh; the pulse is feeble; the bowels usually constipated; and, in women, the monthly period is affected.

Dangers.—The dangers to be apprehended are—*perforation*, when the contents of the stomach escape into the abdominal cavity, setting up *Peritonitis; Hæmorrhage*, which occurs in about four per cent of cases, generally soon after a full meal; and *exhaustion*, consequent on want of nourishment from defective digestion.

Treatment.—*Ars.*, *K.-Bich.*, *Kreas.*, *Atrop.*, *Titan.*, or *Hy-*

dras., are the chief remedies; additional ones are *Uran. Nit.*, *Arg. Nit.* For *Hæmorrhage* see next Section.

Accessory Means.—Ice should be repeatedly swallowed in small pieces; it allays the sickness and pain so often experienced; it also checks bleeding when it occurs. The diet should be simple and digestible; koumiss, milk-and-soda-water, farinaceous food, arrow-root, and beef-tea. In bad cases, complete rest for the stomach for some time, giving nutriment by enemata, is necessary.

167.—Hæmatemesis (*Hæmatemesis*)—Vomiting of Blood (*Vomitus cruentus*).

Symptoms.—Hæmatemesis is usually preceded by nausea, distress or pain of the stomach, or Indigestion; a feeble pulse, pallor, sighing, and other signs of faintness.

The blood is sometimes vomited in considerable quantities and often mixed with food. Dark-coloured or altered blood is ejected from the bowels. Purulent-mucous matter mingled with the blood vomited, indicates Ulcer. (See preceding Section.)

The hæmorrhage may be acute or chronic; the latter is the most dangerous, as it indicates disease of the abdominal viscera.

Treatment.—*Aconitum.*—Hæmorrhage with flushed face, Palpitation and anguish; also for the premonitory symptoms—shiverings, quick pulse, etc.

Hamamelis.—Venous Hæmorrhage from any organ; also when the *state of the vessels* leads to the Hæmorrhage rather than any change in the normal blood constituents. We have so often used this remedy successfully that we now employ it more frequently than other for Hæmorrhage.

Ipecacuanha.—Bright-red blood, with paleness of the face; *nausea;* frequent short Cough; salt taste, blood-streaked expectoration. Often useful after, or in alternation with, *Acon.*

China.—Debility consequent on Hæmorrhage; feeble pulse, cold hands or feet, fainting, etc.

Arsenicum.—*Difficult breathing*, extreme Palpitation, anguish, *burning heat*, thirst, small and quick pulse, etc.

Ferrum.—Spitting or coughing up of blood, with Palpitation, *faintness*, etc.

Arnica.—Hæmorrhage from an *accident*, or severe exertion.

Vicarious Hæmorrhage.—In vicarious Hæmorrhage, as in females when bleeding from the nose or stomach takes the place of the *menstrual* discharge, the treatment should be directed to restoring the normal monthly function.

The following table will enable the reader to determine whether the discharge of blood is from the lungs or stomach.

FROM THE STOMACH.	FROM THE LUNGS.
1. In Hæmatemesis the blood is of a *dark* colour.	1. In Hæmoptysis the blood is of a *bright-red* colour.
2. The blood is *vomited.*	2. The blood is generally *coughed* up.
3. The blood is often mixed with *food*, and is *not* frothy.	3. The blood is generally *frothy* and mixed with *sputa.*
4. Is preceded by nausea and *stomach* distress.	4. Is often preceded by pain in the *chest* and dyspnœa.
5. Blood is generally passed *with the evacuations* from the bowels.	5. Blood is not found in the *stools.*

Accessory Measures.—Calmness and judgment should be exercised, or the discharge of blood may cause alarm to the patient and his friends, and unfit them for carrying out the measures necessary for the safety or even life of the sufferer. The patient should immediately lie down on a sofa or mattress, with the head and shoulders elevated: all tight-fitting clothes should be removed or loosened, quiet maintained, and no talking, crowding, noise, or confusion permitted; the room should at the same time be kept cool and airy—at about 55° Fahr. Ice is a most useful agent for arresting Hæmatemesis, and it should be *swallowed* in small, oft-repeated pieces; it then comes in more immediate contact with, and tends to constrict, the bleeding vessels.

It is also important in Hæmorrhage from the stomach, that the organ should have perfect *rest.* As long as any tendency to Hæmorrhage continues, the patient should remain in bed,

and take nothing by the mouth except sips of *iced-water*. Nourishment, beef-tea, etc., should be introduced by the rectum.

Should faintness occur, no alarm need be excited, because it is often nature's method of arresting the bleeding. After the Hæmorrhage, the patient must still be kept cool and quiet, and the diet be light and unstimulating, while the posture of the body should be such as to favour the return of blood from the bleeding organs. Should the faintness persist, iced champagne is often an excellent restorative, and is not likely to induce vomiting.

168.—Dyspepsia (*Dyspepsia*)—Indigestion.

Definition.—Indigestion is a deviation from the healthy function and process by which food is transformed into chyle ready for absorption into the system, and for the due nourishment of the tissues of the body.

Physiology of Digestion.—Animal life has been compared to a fire; for just as fire requires fuel for its consumption, so life requires food for its sustenance. Like fire, too, the processes of life are attended with the production of a certain amount of heat. The body, moreover, is in a condition of perpetual change, consequent on its various functions, and the wear-and-tear of life. This change continues even when a person lies at rest, for the heart continues to beat, respiration goes on, the blood circulates, the brain is in action, and numerous other functions uninterruptedly continue, from which there results a waste which must be repaired. Under ordinary circumstances, however, when both the mind and body are actively employed, the waste of human tissue is much more rapid, and a large amount of new material is required for its reparation. A man weighing from ten to twelve stones, loses in twenty-four hours, three to four pounds of matter in the performance of the various duties of life. Now the matter thus expended is replenished by *Digestion*, *Respiration*, and *Circulation*. The different kinds of food received into the mouth are in the first instance reduced to pulp by the mechanical tear-

ing and grinding of the teeth, and by the liquefying and chemical action of the saliva with which it is mixed. When it reaches the stomach it is brought into contact with the gastric juice which by the rotatory or churning action of the organ is made to permeate the whole mass. The result is that the food is further liquefied and chemically converted into a semi-fluid product called *chyme*. The gastric juice owes its converting power to the presence of a couple of indispensable ingredients known as pepsine, and an acid or combination of acids. Pepsine is a neutral nitrogenous principle; and the acid is hydrochloric, or lactic, or other acid or acids; physiologists differing as to its essential character. The chyme passes from the stomach into the small intestines, where it is subject to the chemical action of bile (from the liver) and pancreatic juice (from the pancreas). It is thereby converted into a rich, cream-like magma termed *chyle*. The new material is then slowly urged along the small intestines, where absorbent vessels, termed *villi*, receive the nutritive elements, and convey them to the *lacteals*, by which they pass into the circulation. The undigested, useless portions are gradually propelled through the remainder of the intestines, and are disposed of by defecation. The *chyle* being conveyed with the venous blood into the right side of the heart, is propelled by the contraction of that organ into the lungs. Here it is intimately exposed in the bronchial cells to the atmospheric air, and is thereby converted, by the removal of carbonic acid and the reception of oxygen, into bright arterial blood. It is now received into the left side of the heart, is thence diffused through the general circulation, and by means of the arterial capillaries, enters into the various tissues of which the body is composed.

In order that the function of digestion may be properly performed it must take place in a certain temperature, and this temperature is evolved and maintained by the combustion of food in the process itself. If a thermometer be placed under the tongue, the temperature will be found to be 98° Fahr., which is greater than that of the atmosphere; this heightened temperature being the result of the combustion of food and effete matter in the system. The function of digestion, then,

effects two results—it repairs the waste of the body, and it maintains it at a proper temperature.

Indigestion, a deviation from this healthy function, as naturally arises from overtaxing the digestive organs, as do affections of the brain and vocal apparatus from excessive head-work or undue exercise of the voice. It is also occasioned by improper food, simple catarrh, or organic or functional changes, and assumes different forms.

Forms of Indigestion.—From investigations which have been made by Professor Leube, of Jena, it appears that Dyspepsia is dependent on alterations in relative proportions of pepsine and acid in the gastric juice; and he has come to the conclusion that in most cases the functional derangement is due to the lessened quantity of acid and not of pepsine. For a small quantity of pepsine, like other ferments, can act on an indefinite quantity of material, though digestion proceeds more rapidly if more pepsine be present.

Deficient acidity, then, is one form of Indigestion. If the hydrochloric, or perhaps lactic, acid be insufficient in quantity, digestion is enfeebled, or stops entirely. *Excessive acidity* is another form. In this, useless acids—the acetic and butyric—have been secreted. These constitute some of the sour eructations connected with Dyspepsia. The *excessive secretion of mucus* also interferes with healthy digestion; for it acts as a ferment and occasions the production of useless acids. *Torpidity of the gastric glands* retards the digestive process. In such cases, the irritation of the food and the stimulus of saliva are insufficient to excite the secretive action of the glands. Persons who suffer thus resort to spiced and seasoned dishes and condiments to stimulate the stomach; on the other hand, the condition itself is brought about by the unnecessary employment of these stomachic stimulants.

Symptoms.—These vary greatly both in character and in intensity, but there is commonly one or more of the following: —Impaired appetite; flatulence; nausea, and eructations which often bring up bitter or acid fluids and gases; furred tongue, often flabby, large, or indented at the sides; foul taste or breath; heartburn; pain, sensation of weight and inconvenience or fulness after a meal; irregular action of the bowels;

headache; diminished mental energy and alertness; dejection of spirits; palpitation of the heart or great vessels; and various affections in other organs. Disturbances in remote parts may be due to *reflex* or *sympathetic action*; or to the effects of distention of the stomach, which, by encroaching on the space occupied by the lungs, heart, or other organs, impedes their healthy action.

Occasionally, one or two symptoms are so prominent as to exclusively concentrate the patient's attention, who regards them as diseases *per se*. *Loss of appetite, flatulence*, etc., are examples of the most commonly prominent symptoms.

Loss of Appetite (*Anorexia*).—The natural requirements of the body might be neglected but for certain sensations —hunger and thirst—which, no doubt, depend upon some peculiar condition of the nerves. The receipt of alarming or startling intelligence often arrests, in an instant, the keenest appetite. Hunger is much influenced by habit, and returns with great regularity when meals are taken at a uniform hour. Many substances which are non-nutritious destroy or lower the susceptibility of the nervous filaments of the stomach, and thus blunt the natural sensations of hunger; such, especially, are tobacco, opium, and ardent spirits. *Too little out-of-door exercise, irregularity of meals, eating between meals*, and *late hours*, are some of the most frequent causes.

Loss of appetite during acute disease, or a weakened state of the system, should be respected; for thrusting food into the stomach in spite of its dictates will generally give rise to more serious symptoms.

Sometimes instead of loss of appetite there is *voracious* or *depraved* appetite; these symptoms are usually associated with Chlorosis, nervous irritation from worms, etc.; they can only be removed by correcting the condition on which they depend.

Flatulence (*Inflatio*).—This is frequently a prominent and persistent symptom, and is caused by defective nerve-force, or general debility; food may be detained in the stomach and undergo fermentation, owing to imperfection or arrest of the vital and chemical processes characteristic of health. At other times flatulence is apparently generated by

the mucous membrane of the intestinal canal; for the symptoms are very apt to arise in dyspeptic persons when a meal is delayed beyond the accustomed hour, or when the stomach is empty. Flatulence is often associated with faintness, nausea, palpitation, and other disagreeable sensations.

Heartburn (*Cardialgia mordens*).—An acrid or scalding sensation, commencing in the stomach and rising up the throat to the mouth, generally from excess of animal food, and is especially liable to occur in gouty constitutions. *Hiccough* (*singultus*) is a common accompaniment of Heartburn, and consists of brief Spasms of the diaphragm. In infants it is easily removed by administering a small quantity of milk or water.

Nightmare (*Incubus*).—In this condition the patient experiences confused and frightful dreams, with a sense of weight or pressure impeding breathing and producing great anguish; or he fancies himself in imminent danger or difficulty, from which he vainly strives to extricate himself, until he at length succeeds in uttering a cry, or moving, when the distressing condition terminates. It is *caused* by disorder of the digestive organs, and most frequently follows a late, especially a heavy, supper. It may also be induced by fatigue, or an uneasy posture in bed; sometimes the cause is very obscure. In children, enlargement of the tonsils, by obstructing the respiration and occasioning cerebral congestion, is sometimes a cause of nightmare. In such cases, the disorder is worse when the patient suffers from a cold, and differs from that which has its origin in gastric disorder or dentition, in that the attacks recur several times during the same night (see Sec. 103).

Causes of Indigestion.—Irregularities in diet, such as indulgence in the luxuries of the table, partaking of rich, highly-seasoned, heavy, fat, sour, or bad food; *eating too quickly; imperfect mastication of food; eating too frequently*, or, on the other hand, too long abstinence from food; the use of hot and relaxing drinks, green tea, coffee, tobacco, wine, and alcoholic beverages; too little out-of-door exercise; excessive bodily or mental exertion; late hours; exposure to cold and damp, etc. Business and family anxieties are

frequent causes of Dyspepsia, and their operation is very general and extended, implicating not only the mucous coats of the stomach, but the liver, the bowels, and often the whole nervous system. "The battle of life" is too often fought, not only with much wear and tear, but with almost overwhelming anxieties and disappointments; and the digestive organs are often the first to suffer from depression of the mind. In this respect, the cause is often put for the effect, the common remark being that depression of spirits follow Indigestion; but it is more true to say, that Indigestion accompanies depressed spirits. When the mind is depressed by disappointment or anxiety, there is a corresponding depression of the nervous energies, and so the stomach, in common with other organs, loses vital force.

Hence, in the *treatment* of Dyspepsia, the use of medicines and the observance of hygienic rules and habits must ever be united; for the former, however correctly prescribed, will, alone, be unavailing.

Epitome of Treatment.—

1. *Acute Dyspepsia.*—Nux Vom., Bismuth. (*red tongue severe pain towards night; Spasm*); Puls. (*from rich or fatty food*); Iris (*vomiting and diarrhœa with headache*); Ars., Coloc. (*from sour fruits or vegetables*); Hydras. (*acetous or atonic Dyspepsia*); Bry.

2. *Chronic.*—Nux Vom., Puls., Hep.-S., Bry., Carbo Veg., Calc., Sulph., Lyc., Ant.-C., K.-Bich., Merc., Arn. Also Pepsin; or Papya, as recently recommended by Dr. Roy, of Glasgow.

3. *From mental causes.*—Nux Vom. (*business anxiety*); Ign. (*grief*); Acon., China, or Nux Vom. (*night-watching*, etc.)

4. *Debilitating losses—Diarrhœa, Hæmorrhage, Suppuration*, etc.—China, Ac.-Phos., Phos., Ferrum, Helon.

5. *From cold.*—Acon., Ars., Merc., Puls.

6. *Special symptoms.—Loss of appetite*—Calc., Ferr., or China; *Depraved appetite*—China or Cina; *Sickness*—Apomorphia, Ipec., Ant.-C., Kreas.; *Flatulence*—Lyc., Ign. (*with constipation*), or Carbo Veg. (*with Diarrhœa*); *Heart-burn*—Puls., Caps., Bry. or Nux Vom.; *Hiccough*—Nux Vom., Cauloph., Gels., Ars., Ac.-Sulphˢ. (*with Acidity*); *Water-brash*

—Bry., Lyc., Nux Vom.; *Chronic Acidity*—Calc., Rob., Ac.-Sulph^{s}.; *Nightmare*—Nux Vom. (*from Indigestion or abuse of spirits*), China (*with oppression*), Sulph. (*with Palpitation*).

Leading Indications.—

Nux Vomica.—Pain, tenderness, and fulness of the stomach after meals; heartburn; sour acid risings; flatulence; frequent vomiting of food and bile; sour or bitter taste; the *head* is confused, *aches early in the morning*, the patient feels indolent and sleepy after a meal, and unfitted for any exertion; there are a sallow, yellowish complexion and an *irregular* action of the bowels, with *ineffectual urging*. *Nux Vom.* is particularly indicated in persons of dark, bilious complexion, who employ their brains too much, but take too little open-air exercise, eat largely, and drink alcoholic liquors. A tendency to Piles is a further indication for *Nux V.*, and also for *Sulph.*, which may advantageously follow it.

Pulsatilla.—Indigestion from fatty food or pastry, with much secretion of mucus; *heartburn;* acid, bitter, or putrid taste; frequent *loose evacuations.* It is specially suited to females with deranged period, and to persons of a mild disposition.

Apomorphia.—Symptoms calling for *Nux* or *Puls.*, nausea and disinclination to eat; if given at the *onset of sick feeling*, and repeated every ten or fifteen minutes, it will give relief.

Bryonia.—Pressure or weight, as of a stone, after food; frequent *bitter or acrid eructations;* nausea, or bilious vomiting; *stitch-like pain, from the stomach to the blade-bones;* painful soreness at the pit of the stomach on coughing or taking a deep breath; constipation; severe headache, worse after every movement; obstinate, irritable disposition.

Lycopodium.—Atonic Dyspepsia of weakly patients; *delayed digestion from deficient glandular secretion and muscular energy;* too little nervous force to spare for digestion, so that during its process an irresistible drowsiness comes on, and the sleeper awakes exhausted; also when, from like causes, flatulence collects in abundance, and the bowels are utterly torpid (*Hughes*).

Antimonium Crudum.—Aversion to food, or loss of appetite; sensation as if the stomach were overloaded; *eructations,*

tasting of the food; nausea, or vomiting of mucus and bile; escape of flatulence, with an early reproduction of the symptoms; alternate diarrhœa and constipation; pimply eruptions on the face, or sores on the lips or nostrils.

Hepar Sulphuris.—*Chronic* Indigestion; nearly all kinds of food disagree; craving for stimulants; also if *Mercury* has been too freely prescribed.

Sulphur.—Cases of long standing, when only partial relief has followed the use of other remedies; and as an intercurrent remedy. It is particularly required in *strumous constitutions*, and for Indigestion associated with or following acute or chronic *eruptions*, *piles*, *constipation*, irritability, glandular swellings, affections of the eyes, or other scrofulous disorders.

Carbo Veg.—Chronic Indigestion, with *flatulence*, heartburn, headache, debility, etc. Very useful in the aged.

Calc.-Carb.—Defective digestion and assimilation, with *obstinate acrid eructations;* relaxed bowels; sensitiveness to cold and damp; fatigue after slight exertion; Cough; gradual emaciation; and, in females, too frequent and profuse menstruation. (Follows *Puls.* well in chronic cases.)

Accessory Measures.—More can be accomplished by dieting than by the use of medicines, and without attention to the former the latter will be of little use. The following points in the treatment and prevention of Indigestion should, therefore, as far as possible, be adopted.

1st. *Mastication.*—The reduction of food to a state of minute division in the mouth is a most essential step towards easy and perfect digestion. Digestion really means disintegration and *solution;* and as solid substances, intended by the chemist for solution, are first reduced in the laboratory by the pestle and mortar, so must the teeth perform a precisely similar process with the food. Not a particle capable of being further reduced by the teeth should be admitted into the stomach, as the work of the former can never be fully performed by the latter. A stomach, especially a weak stomach, acts tardily and imperfectly upon food introduced in an incomplete state of comminution. Further, food requires to be well masticated, that it may be duly *mixed*

with saliva. In front of the ear, we have the parotid gland; beneath the jaw, at the sides, the submaxillary; and under the chin, the sublingual; all these secrete saliva, which pours into the mouth through minute openings during mastication. This salivary secretion is intended not only to moisten and lubricate the food, but, as it is the most powerful stimulant to the secretion of the gastric glands, to render most essential chemical aid in digestion, such as no other liquid can supply. The action of the saliva is especially necessary for the digestion of vegetable food; for it is only by means of this fluid that such articles of diet as potatoes, bread, rice, etc., are rendered at all capable of absorption. We therefore caution the busy, the studious, the solitary, or, on the other hand, those persons who talk too much during meal-times, of the danger of neglecting the perfect mastication of their food. *The loss of teeth* is a frequent cause of Indigestion, but, happily, generally remediable; for when the natural teeth are lost, the skill of the dentist supplies us with useful substitutes. Where the teeth are lost or decayed and substitutes cannot be supplied, a small mincing apparatus may be employed; but in the use of it care must be taken to retain the food in the mouth a sufficient time for the full intermixture of saliva.

2. *Regularity of meals.*—The quantity of food to be taken at one meal must be regulated by circumstances; and this should in turn regulate the frequency of the meal. The smaller the quantity, the more frequent should be the meal. No longer interval than four or five hours is advantageous to health. This gives sufficient time for ordinary digestion and for some little repose to the stomach. A longer interval only weakens the general system, and with it the special organ and function of digestion. It, moreover, renders necessary a larger meal, a greater tax on the weakened digestive powers, and a consequent strain which may give rise to Indigestion. The meal should be taken *leisurely.* Haste is prejudicial. It is with digestion as with other kinds of work, haste is the cause of imperfection, deliberateness gives time for the better performance of whatever is to be accomplished. Moderate meals, at moderate intervals, leisurely taken, are best for

digestion. We have endeavoured to indicate what these are in the 2nd Sec. of this "Text Book."

3rd. *Overloading the Stomach.*—Too large a quantity of food interferes with digestion in two ways. (1) Undue distention of the stomach interferes with the churning motions which characterise the process of digestion, and impairs the subsequent necessary contraction. (2) The secretion of gastric fluid is probably of a uniform quantity; therefore an inordinate amount of food would not be duly saturated with this indispensable fluid. The normal limits of the stomach are always exceeded when food has been taken in such a quantity as to produce an uneasy sense of distention. After long abstinence from food, as in the case of persons who dine late and take too little lunch, there is great danger of eating too much, unless the meal be taken slowly, or finished before the sensations of hunger are completely appeased. The same danger is likely to arise from too many dishes, or too stimulating articles of food; a morbid craving is thus excited long after the natural appetite has been satisfied.

4th.* *Suitable food.*—One main object in therapeutics being to relieve those parts of the system which are flagging from over-work, in disordered digestion, a regulation of the diet should be effected to suit the enfeebled powers. Ordinary dyspeptics must in this matter be guided by experience; not only avoiding whatever articles of food are usually regarded as indigestible, but also those which are found to disagree with them in their own particular case. Solid food is not necessarily less digestible than liquid; indeed the latter, through insufficient employment of the stomach and stimulus of the gastric glands, is likely to lower the digestive function. As a rule, animal food is more easily digested than vegetable, and it is well known that a weak stomach is much more liable to flatulence, and other symptoms of indigestion, after vegetable food than after animal. The teeth of man are of two kinds, showing that he is intended to subsist both on animal and vegetable food; thus a due admixture of both is probably more easily digested than a more or less exclusive use of either. It is especially necessary that the dyspeptic should

* See Author's "Essentials of Diet," 2nd Edition.

select *tender* and *perfectly fresh* animal food, and have it *cooked* so as to retain all its natural juices. The suggestions contained in Section 5, on "Cooking," are of great importance. Food cannot be too simply or plainly dressed. A diet into which animal food enters largely, which is thus rich in nitrogenous elements, is only suitable for persons in good health and of *active out-door habits.* The feeble and sedentary can only inadequately oxygenise the material. The consequence is that the system becomes overloaded, and clogged with effete products, causing Gout, Gravel, Stone, biliary and other derangements. Fatty food, when fresh and moderate in quantity, passes through the stomach into the intestines, where it is converted and appropriated. But if it have undergone change by being kept (become rancid), or be decomposed by exposure to too great heat in cooking, or be taken in excess, it excites nausea, sickness, and diarrhœa; or is productive of volatile, useless acids which cause acrid eructations, burning in the stomach and throat, and other gastric troubles. Similarly, carbo-hydrates which are not fully digested in the stomach should be cautiously taken. Foods, the chief constituent of which is starch, as potatoes, rice, sago, etc., should be eaten only as *additions* to food containing a large amount of nitrogenous materials. In certain states of the stomach, starchy and saccharine matters, especially the latter, are transformed into an excess of lactic acid, which causes acidity in the throat and mouth. In the selection of food, hard, dried, cured meats and fish—ham, tongue, sausages, dried salmon, kippered herrings, and the like—are especially to be avoided. In the same category we may place veal, pork, twice-cooked meats, salmon, lobsters, crabs, salads, cucumbers, raw vegetables, cheese, new-baked bread, coffee, and all other substances known to disagree with the patient. The last remark is important; for if pain or discomfort follow any kind of food or drink, it should be regarded as a warning to avoid it afterwards. Vegetable foods, especially cabbages, are very liable to cause flatulence. Peas, beans, and other leguminous seeds, are unsuitable to weak digestion. Succulent, vegetable food encourages evacuations. Fruit, especially if taken in the early part of the day, corrects

constipation; but too much of it, through excitement of the muscular action of the stomach, produces griping, colic, and diarrhœa. Eggs cause constipation. Pastry, on account of the presence of fat, and flour puddings, on account of their close consistence, are trying to the digestive powers. Brown bread acts as a mechanical irritant, and stimulates muscular and glandular action. New bread, soft and cohesive, is less easily masticated and acted on by the gastric juice than stale. Where there is *flatulent distention of the abdomen*, biscuit should be substituted for bread, lemon juice taken freely as a substitute for vegetables, and soups, rich sauces, and fruits avoided. In febrile, acute inflammatory, and debilitated conditions, where there is feeble digestive power, the simplest non-nitrogenous food should be taken, otherwise it will remain undigested, irritate the stomach, and unduly excite the glandular functions. For further information respecting diet, see Sections 2 and 6.

5th. *Beverages.*—As a general rule, patients who suffer from Indigestion are better without malt liquors, wines, or spirits; a high standard of health being often best maintained altogether apart from the use of alcohol. Perhaps certain patients suffering from acute Indigestion, or others in whom the powers of life are much enfeebled, may be benefited by a *moderate* and *temporary* use of stimulants. But if the use of these liquors be followed by excitement, flushing of the face, or any other inconvenience, they should at once be given up. Even when their use is at first attended by apparent benefit, *they should be discontinued when the circumstances which required them no longer exist;* for in our practice we have found that the most severe and obstinate forms of Indigestion occur as the result of the excessive use of alcoholic beverages. In addition to cocoa (*from the nibs*) or tea, for the morning and evening meals, the moderate use of *pure water* is almost the only fluid required. This liquid, so often despised, and even regarded by many as prejudicial, is one of the most potent means for preventing or curing Dyspepsia. Water, however, should only be taken in moderation. Two or three glasses a day is enough for most persons. It is best to avoid drinking cold water at meals, except very sparingly; not, as is generally supposed,

because it dilutes the salivary or the gastric secretion, but because it reduces the temperature of the stomach, and checks its action.

6th. *Disposition in which to eat.*—A cheerful and tranquil frame of mind, especially during meals, is a most essential point in the treatment and cure of Indigestion. Cheerful conversation and ease of mind favour digestion by increasing the secretion of gastric juice. The aliment received under pleasurable circumstances may be expected to furnish in abundance, and in the highest state of perfection, those secretions which are necessary to good digestion. "Laughter," says Hufeland, "is one of the greatest helps to digestion with which I am acquainted; and the custom prevalent among our forefathers of exciting it at table by jesters and buffoons, was founded upon true medical principles. In a word, endeavour to have cheerful and merry companions at your meals; what nourishment one receives amid mirth and jollity will certainly produce good and light blood."

7th. *General Habits.*—Mental or bodily occupations should not be resumed immediately after a full meal; nor should food be taken without a few minutes' pause after exhaustive fatigue. Violent muscular exertions arrest digestion by engaging the nervous energies in other directions. The weary man, whether weary from the sweat of the brow or the sweat of the brain, should rest before he eats; and if the cause of fatigue has been in operation till the time of rest approaches, solid food might then be productive of the most serious results. Under such circumstances, if nourishment be deemed necessary, it should be limited in quantity and of the lightest kind, as a cup of beef-tea, cocoa, or chocolate, or the yolk-of-an-egg well beaten up with milk. We particularly recommend *The Plan of General Dietary* (see Sec. 2) for general adoption. Sleep after dinner is generally prejudicial, but if indulged in, it should be only a short light nap; a long sleep retards digestion. *Regularity* in the habits of life, such as in sleep, exercise, etc., is an important condition in the prevention of Dyspepsia. Feather beds, and too much sleep, should be avoided; the patient should retire and rise early, bathe or sponge the body every morning with cold water, and take moderate open-air

exercise daily. An occasional *change of air* and scenery exercises a wonderful influence in removing or preventing an attack of Indigestion, diverting the mind from its ordinary train of thought, business and family anxieties, or gloomy pondering over personal ailments. Fortunately, our railway system is now so perfect and widespread, and withal so economical, that few, by the exercise of a little foresight, need be deprived of so potent an aid to good health.

169.—Gastrodynia (*Gastrodynia*)—Pain or Spasms in the Stomach.

Pain in the stomach may be spasmodic or neuralgic. The latter has been already treated of in Section 99.

Symptoms.—Severe pinching, gnawing, or contractive pains in the stomach, generally occurring after taking food.

Causes.—Highly-seasoned or indigestible food; stimulants, coffee, and tobacco; long fasting; exposure to cold or damp; etc. Gastrodynia is usually but a symptom of Indigestion.

Treatment.—Nux Vom. (*severe Spasm*); Bry. (*in rheumatic patients*); Arn. (*soreness*); Bismuth. (*dull, pressing pain, with frontal headache*); Ac. Oxal. (*cutting pain*); Ferr. (*Anæmia or Chlorosis*); Ars. (*pain and vomiting after food; periodic*); Tabac.; Puls.

Accessory Treatment.—In severe cases, two or three folds of flannel, wrung out of hot water, and applied as hot as can be borne: in mild cases, warmed dry flannels. Attention to the "Accessory Measures" suggested in the previous Section is often alone sufficient to cure Gastrodynia.

170.—Vertigo (*Giddiness*).

In a mild form, Giddiness is generally the result of Dyspepsia, or nervous exhaustion. When Vertigo is severe and recurs, it often points to disease of the brain, heart, or kidneys. Vertigo generally exists in structural changes of the brain.

VERTIGO IN MALES BETWEEN FORTY AND FIFTY.—There is a form of simple Vertigo apparently unconnected with any other morbid phenomena, generally occurring in males between forty-four and forty-eight years of age. It is often extremely distressing, may continue for months or years, and is very rebellious to treatment. Ultimately, however, it disappears without any evidences of nervous or other mischief. It most frequently appears in men who have much business or other anxiety, and will find a remedy in *Nux V.*, *Phos.*, *Ac.-Phos.*, *Borax*, *Gels.*, *Glon.*, or *Cocc.*; the last named being most suitable when the Vertigo is followed by vomiting.

EPITOME OF TREATMENT.—

Nux V., Puls., Bry., Podoph. (*from Indigestion.* See Sec. 168).

Bell., Gels., Glon., Cocc. (*from Congestion.* See Sec. 100).

Phos., Ac.-Phos., China, Zinc. (*from Brain-fag.* See Sec. 102).

171.—Bilious Headache.

The Headache of Indigestion is commonly termed *bilious.* It arises in connection with stomach derangement or some excess, and is generally accompanied by foul tongue and breath, pain in the stomach, nausea, deranged bowels, etc. It is necessary to discriminate between this and Headache of a different character and arising from other causes, as *nervous* Headache, from exhaustion consequent on Hæmorrhage, prolonged lactation, Hysteria, etc.; or *toxæmic*, as in Enteric fever, Scarlet fever, etc.; or *organic*, from cerebral disease.

EPITOME OF TREATMENT.—

SICK (*bilious*) HEADACHE.—Iris (*copious bilious vomiting*); Cham. (*in females from cold or worry*); Nux V. (*with Constipation*); Bry. (*vomiting of bitter fluids*); Acon. (*from Catarrh*); Nux Mosch. (*constant, with salty taste*); Ipec., Puls., Ant.-Crud., Merc., Sepia, Sang., Cocc., Zinc., Calc. Acet.

172.—Pyrosis (*Pyrosis*)—Water-Brash.

Symptoms.—Eructations of an acid or tasteless watery fluid, sometimes in considerable quantities. It seems to arise from closure of the œsophagus by muscular Spasm, so that the trickling saliva is prevented from passing into the stomach, and ascends into the mouth without any effort. It is often accompanied with pain, and is sometimes a symptom of organic disease of the stomach or liver, but is commonly due to chronic Gastric Catarrh.

When arising from Indigestion it is generally due to the too exclusive use of a vegetable diet, or to other indigestible food; it is of common occurrence amongst the poorly-fed.

Treatment.—*Carbo Veg.*—Acid or acrid eructations, with flatulence, and, usually, Constipation, sometimes Diarrhœa; *Lyc.* in chronic cases; *Nux Vom.*, *Ac.-Sulph.*, *Bry.*, *Puls.*, *Verat. Alb.*, and *Ac.-Acet.* are also recommended.

In obstinate cases of this disease, the most brilliant results often follow Krukenburg's prescription:—"When the patient is hungry, let him eat butter-milk, and when he is thirsty, let him drink butter-milk." Fresh milk is not so well borne, as it curdles on the stomach.

173.—Vomiting (*Vomitus*)—Sickness.

Causes.—Too large a quantity of, or improper food; a disordered condition of the digestive functions; pregnancy;* disease or irritation in other organs, as the brain, lungs, kidneys, uterus, etc.; Cancer or Ulcer of the stomach; mechanical obstruction of any part of the intestinal canal; morbid states of the blood; it also occurs in most of the eruptive fevers.

Prognosis.—Nausea and vomiting occurring in diseases of the brain, as in Epilepsy, are unfavourable indications; on the contrary, in pregnancy or Hysteria, no alarm need be felt, as they are merely symptomatic of irritation conveyed

* For the treatment of "Morning Sickness" in pregnancy, see the "Lady's Homœopathic Manual."

by the nervous system to the stomach. We may learn much by observing the time of the occurrence of vomiting, the nature of the matters ejected, and the extent and urgency of the symptoms. If vomiting afford relief, and the nausea, oppression of the chest and stomach, and Headache cease, the case may be considered favourable; if, on the other hand, the symptoms preceding vomiting are not relieved by it, but increase, the disease must be regarded as having taken an alarming form.

TREATMENT.—Should vomiting arise from over-repletion, or from indigestible food, it may be regarded as a conservative effort, and should be encouraged, within proper limits, by drinking warm water, or tickling the throat with a feather until the offending material is expelled. If sympathetic of organic disease, the treatment should be directed to the primary cause, while temporary relief from the vomiting may be obtained by the use of one of the following remedies. Under other circumstances, a remedy may be selected according to the causes of the vomiting, and the symptoms which exist.

Ipecacuanha.—*Simple copious vomiting*, with nausea; greenish or blackish and mucous vomit; Diarrhœa.

Apomorphia.—Tongue clean, bowels regular, no headache, desire for food, no pain after eating, nausea at intervals, especially after taking food. Similar indications to *Ipec.* *Sympathetic* vomiting.

Kreasotum.—Chronic *persistent* vomiting. When the affection does not depend on simple Indigestion, *Kreas.* is one of the best remedies; also for *persistent retching*, without vomiting.

Arsenicum.—Vomiting, purging, great *prostration*, with a *burning sensation* in the stomach and throat, and cold hands and feet. When caused by Ulcer, Cancer, or other malignant disease of the stomach, this remedy affords much relief.

Bismuth Nit.—Chronic gastric irritation, with pain, and *red tongue.*

Arsenite of Copper (2x trit.) has been successfully employed in obstinate paroxysmal vomiting, after the usual remedies had failed; a dose being administered as soon as nausea indicated a return of the paroxysm.

Zincum.—The food is *suddenly ejected*, without retching; and the patient becomes emaciated.

Ant.-Crud.—Nausea, heaviness of the stomach, foul white tongue, and dislike to food, which continue unabated after free vomiting.

Secale.—Chronic vomiting of sour mucus, with offensive eructations.

Iris.—Bilious attack. Often an effectual remedy.

Additional remedies are *Ant. Tart.*, *Ac. Carbol.*, *Iod.*, *Petrol.*, *Ferr. Mur.*, *Æthus.*

Accessory Means.—Small pieces of ice placed on the tongue are very grateful, and tend to allay the sickness. The diet should be simple, nourishing, and non-irritating. Beef-tea is often suitable, and may be given every one to three hours, in small quantities, till other food can be borne. In many cases, soda-water-and-milk, in equal proportions, given in small quantities, freshly mixed, can be retained and digested. The stomach will often retain bland liquid diet when it would reject any other.

174.—Sea-Sickness (*Nausea Marina*).

This affection, though very distressing, is not serious; it is caused by the vertical motion of the vessel. The seat of the disorder has been supposed to be in the brain, and the sickness probably arises from a deficient amount of blood supplied to that organ. But the abdominal viscera are those to which the balance of authority has pointed as most probably the organs primarily disturbed. The retching and vomiting frequently recur, with intervals of extreme physical prostration, a sinking sensation at the pit of the stomach, Vertigo, Headache, etc. The symptoms, especially the Vertigo, are most severe in the upright posture, and are at once relieved by placing the patient in a strictly horizontal one.

Persons of delicate and sensitive organisation, with weak heart, quick pulse, and tendency to Palpitation, are most liable to be affected, and are sometimes subject to similar derangement from the oscillations of a carriage or swing.

Treatment.—*Petrol.*, *Cocc.*, and *Nux V.*, are the best preventives; and *Kreas.*, *Tabac.*, or *Petrol.*, during the sickness. *Petrol.* should be taken on going on board; a drop or two on a small piece of sugar, repeated every two or three hours. From personal experience in voyages across the Atlantic, we recommend this as the best remedy for sea-sickness. *Nux V.*—For Indigestion with Constipation we found this remedy of great value, and administered it in many cases with good results. *Cocc.* checks the tendency to sickness which affects some persons from riding in a railway carriage. *Ver.-Alb.*, *Podoph.*, and Rubini's *Camphor* have also been recommended. *Hydrate of Chloral*, in doses of thirty grains, will often enable the worst sailors to make a short sea-passage in perfect comfort.

Accessory Means.—If the previous statement be correct—the sea-sickness is caused by an insufficient supply of blood to the brain—our first attempt should be to facilitate the afflux of blood to that organ, by a favourable posture, and by imparting strength to the heart's action. The *horizontal posture*, therefore, should be assumed; and small quantities of arrow-root, beef-tea, or such light diet, taken as best agrees with the patient. Champagne—iced if possible—is the best beverage, if it suit the stomach. Soda-water with a small quantity of brandy often suits well. Drinking a tumbler of *tepid fresh water* is followed by ejection of the liquid, and thus brings immediate relief. When the symptoms are subsiding and the appetite is returning, a cup of good coffee without milk or sugar, with a plain biscuit or a small slice of toast, is often grateful.

Prevention.—For several days before embarking, indigestible food, over-repletion, or any irregularity in diet, should be avoided. At the same time, one or more of the preventive remedies should be taken. Dr. Marsden informed the author that he had found those medicines most efficacious which, taken a day or two before going on board, improve the digestion, and act downwards. During the early part of the voyage, unless the weather be very fine, the patient should remain in his berth in a horizontal posture, and take chiefly liquid food—beef-tea, chicken-broth, etc. A girdle, moderately

tight, round the waste and abdomen, a *magnetic belt*,* or a stomach compress, without india-rubber cloth, has also been recommended. Warmth to the stomach and feet tends very much to prevent sea-sickness. Anything to amuse, and divert the attention from the waving motion, is useful. Strong mental excitement is counteractive.

175.—Enteritis (*Enteritis*).

Definition.—Inflammation of the intestines, throughout a greater or less extent of their course, involving all the coats of the intestines, or only the mucous lining. In the latter case, the disease is termed *Muco-enteritis*, and occasionally affects children from six to eight months old.

Symptoms.—Enteritis is preceded by rigors, dry, hot skin, quick, wiry, strong pulse, thirst, nausea or vomiting, and often confined bowels. The patient complains of severe pain in the abdomen, especially concentrated around the navel, which is aggravated by pressure. He lies on his back, with his knees raised, so as to relax the abdominal parietes. When diarrhœa sets in, the motions are frequent, and give temporary relief from the griping pains.

Diagnosis.—*Enteritis* may be distinguished from acute *Peritonitis*, by the more local character of the pain and tenderness, by the pain being generally limited to the vicinity of the navel, and by the symptoms being less acute; from *Colic*, by the tenderness on pressure, the quick pulse, fever, and prostration; from *intestinal obstruction*, by the early occurrence of the pain and tenderness, and the rapid progress of the case.

Causes.—Cold; errors in diet, such as eating too many raw apples or pears; the use of strong drinks; worms; internal

* A patient, who had in many previous voyages invariably suffered from Sea-Sickness, recently consulted the Author before setting out for the East Indies. A magnetic belt was recommended. On his return the gentleman reported that although he had an extremely rough passage, he did not once suffer from his old enemy, but ate and slept as well as on land, and came home much improved in health.

strangulation of the intestines; some general disturbance, as from fever.

TREATMENT.—*Arsenicum.*—Severe *burning pains* around the navel, obstinate vomiting, and excessive *prostration;* chronic Duodenitis.

Mercurius Cor.—Hard, distended, and tender abdomen; fœtid, watery stools; constant urging to stool, followed by hard *straining*, and evacuations of *mucus* or *mucus and blood.*

Colocynth.—Inflammation of the large intestines and *rectum*, with *drum-like distention of the abdomen;* severe gripings; bilious nausea or vomiting.

Podophyllum.—Enteritis of the *smaller* intestines; diarrhœa, with stools constantly changing in appearance; *morning* exacerbation; *Duodenitis;* affection of the biliary ducts, and tendency to Jaundice.

Kali Bichrom.—Has a specific influence on the *duodenum*, and is called for when in addition to other symptoms there are thickly-coated, whitey-brown tongue, bitter taste, and pale stools.

Lachesis.—Inflammation of the *cæcum.*

Veratrum Alb.—Great thirst; furred tongue; nausea and vomiting; severe prostration; *cold extremities*, etc.

Aconitum.—At the commencement, and during the course of the disease, alone, or in alternation with any other remedy indicated, to moderate *fever* and *pain;* especially if the whole mucous tract be involved.

ACCESSORY MEANS.—Perfect *quiet* in bed. *Hot fomentations*, to the abdomen, sedulously employed, and followed by a carefully-applied wet compress. *Hot flannels*, or flannels wrung out of hot water and sprinkled with a few drops of *turpentine.* (See Sections 35 and 33.) *Ice* or cold water may be freely swallowed. When the inflammation subsides, beef-tea, milk-and-soda-water, or some farinaceous food may be given.

176.—Dysentery (*Dysenteria*)—Bloody-Flux.

DEFINITION.—A febrile disease, consisting of Inflammation and Ulceration of the minute lenticular and tubular glands of

the lining of the large intestine, attended by *colic*, *straining*, *tenesmus*, and scanty *mucous* or *bloody* stools in which there is little or no fæcal matter.

Dysentery is a very common and fatal disease in hot countries, and has been one of the most fearful scourges of the army and navy. In all tropical regions, the mortality is considerable. A tabular statement respecting European troops in the three older Indian Presidencies show that the mortality from Dysentery was 15,882 against 3,045 from Diarrhœa, during the same periods. The disease is very insidious in its approach, liable to recurrence, and disastrous, not only *per se*, but also in the intractable and chronic abdominal diseases which it entails. It is not an aggravated form of Diarrhœa, for in this disease the stools contain some fæcal matter, whereas in Dysentery they consist of mucus, pus, and blood.

Symptoms.—These vary considerably with the type of the disease. Simple cases occur, and run their course, with little constitutional disturbance; but an acute attack commences with a chill or rigor, and is soon followed by quick pulse, hot skin, flushed face, and often pain in the head, thirst, furred tongue, nausea and vomiting. Griping, irregular pains in the abdomen—*tormina*—are experienced, and the patient is often harassed by a sensation as if there were some excrementitious matter in the bowel ready to be evacuated, and he is irresistibly impelled to strain violently to remove the irritation. This, the most marked symptom of Dysentery, is called *tenesmus*, and although the desire to go to stool is frequent and urgent, the patient is unable to pass anything except a little mucus and blood, shreds of fibrine which the patient often thinks to be the coats of his own bowels, and sometimes, balls of hardened fæces, called *scybala*. The spasmodic action often extends to the bladder, exciting frequent efforts to pass water. In hot climates, the attacks are acute and violent, the pain being very severe around the navel and at the bottom of the back-bone; sometimes Hæmorrhage occurs from an artery being opened by Ulceration, or Abscess of the liver is a sequel of the disease. In unfavourable cases there follow loss of strength and flesh, small and rapid pulse; mental distress, and an anxious and depressed countenance; the abdomen becomes

increasingly tympanitic, with bearing-down of the lower bowel, burning heat, *hiccough*, sudden cessation of pain, cold sweats, sharpened features, Delirium, and death. In favourable cases, the strength is not much reduced, while warmth and moisture of the skin, subsidence of the colic and a more natural character of the evacuations, indicate a tendency to recovery.

Causes.—"I believe Dysentery to be caused by the action of a poison in the blood having a peculiar affinity for the glandular structures of the large intestine. This poison I believe to be a malaria generated in the soil by the decomposition of organic matter" (*Maclean*). The effluvia from dysenteric stools are infectious, and, consequently, are a cause of the disease. It is probable that the following are efficient agents in the *propagation*, rather than in the *causation* of Dysentery:—Exposure to extreme and sudden changes of temperature, as from the heat of day to the cold and damp of night; impure water; insufficient protection from cold and wet, as sleeping on the ground with the abdomen insufficiently covered; intemperance; a poor or irregular diet, etc. It is therefore often epidemic among those who are reduced by privation. An exemplification of this may be found in the case of our soldiers, with whom the impure water, offensive to taste and smell, and the unsuitable provisions of salt meat, rice, and bread, which they had to put up with for three weeks after landing on the Gold Coast in June, 1873, added to the unusual severity of the season, doubtless acted as predisposing causes. Though by strict medical examination found strong and robust before leaving England, these men were long unable to expel the poison, but suffered frequent relapses, Dysentery running into Remittent fever and *vice versâ*.

Treatment.—*Aconitum.*—If febrile symptoms are well marked, the early use of this remedy often arrests the disease at its onset. It should be administered several times, at intervals of an hour.

Merc.-Cor.—*Bloody* evacuations, mucus mixed with blood, or almost pure blood; severe pain and *straining* before, and especially *after*, discharge; urine completely suppressed, or passed with great difficulty, with severe tenesmus of the

bladder, while yet the patient lies *perfectly quiet and composed.*

Aloes.—Dryness of the mouth and thirst; *shooting, boring* pains near the navel, *increased by pressure;* swelling of the lower part of the abdomen, which is sensitive to pressure; distention in the *left side* and along the track of the colon, worse after eating; *fainting during stool;* stools of bloody water; *violent tenesmus,* especially at the extremity of the rectum; frequent *cutting pains* with *pinching* in rectum and loins; heaviness and numbness in the thighs.

Arsenicum.—*Great thirst,* but patient drinks little at a time; cold breath; tongue looks blue; perspiration sticky and cold; eruptions may appear on the skin; cold extremities; excessive *weakness;* patient despairs of life, and is very restless; *before stool,* feeling as if the abdomen would burst; *during stool,* feeling of contraction above the anus; *after stool, burning* in rectum, trembling in limbs, also palpitation of the heart and exhaustion; putrid fæces; urine offensive, greenish, and passed with great pain. Especially indicated in constitutions enfeebled by previous disease.

Colocynth.—Often required after *Merc.-Cor.,* or in alternation with it, especially when *colicky pains* are very severe; the abdomen distended, tongue white, and discharges slimy; the patient is *doubled up* with pain, pressing any object against the abdomen for relief; fruitless attempts to vomit; burning along the sacral region.

Erigeron Canadense.—Great irritation of the *urinary organs,* urination painful and suppressed; extreme tenesmus; frequent bloody evacuations; scybala.

Ipecacuanha.—Autumnal Dysentery, with nausea and vomiting, uneasiness, straining, and Colic; the evacuations are frothy, fœtid, and afterwards bloody; sometimes mucous and greenish. Often advantageous in alternation with *Bry.*

Bryonia.—Pains aggravated by the least movement, even of the arms; great thirst for *large draughts* of water. Preventive of Constipation after recovery.

Belladonna.—At an early stage, if the pains *appear and disappear suddenly;* sharp, shooting pains; great bearing down; tenderness of abdomen on pressure; danger of Peritonitis.

Nux Vom.—The first to be given after allopathic drugging; special symptoms are *small* and frequent evacuations, with violent tenesmus, which ceases with the evacuation; *pain* in the *back*, as if it were *broken*, in the region of the sacrum. As a Prophylactic, a dose daily.

China.—Dysentery in marshy districts; putrid and intermittent Dysentery; weak, thready pulse; cold extremities, when the bowels have regained their normal condition.

Rhus Tox.—Involuntary nocturnal discharges; cutting pains in the abdomen; almost constant urging to stool.

Sulphur.—Obstinate cases, where ordinary remedies fail in affording relief, especially where there is constitutional taint, or hæmorrhoidal disease; also an intercurrent remedy, and during convalescence.

Hydras., *Ham.*, *Puls.*, *Gambogia*, or *Ænotheria*, may prove usual.

Administration.—In urgent cases, a dose every twenty or thirty minutes; in less severe, every three or four hours.

Chronic Dysentery.—*Phos.*, *Ac.-Nit.*, *Sulph.*, *Chin.*, *Calc.-C. Ver.*, and *Ac.-Phos.* are our chief remedies.

Accessory Means.—The patient should maintain a recumbent posture in bed, in a well-ventilated apartment, and, in severe cases, use the bed-pan instead of getting up. Local applications afford great relief, and should not be omitted: the best is the *Abdominal compress* (see Sec. 33). If the pains are very severe, large hot poultices, or flannels wrung out of *hot water*, should be applied over the abdomen, a second hot flannel being ready when the first is removed. Great benefit often results from injections, if there be not too much inflammation to admit of the introduction of the enema-tube: they may be administered after each evacuation if they prove beneficial. The first two or three injections may consist of from half-a-pint to a pint of tepid water, the temperature being afterwards gradually reduced. Copious injections remove the fœtid accumulations, and soothe the inflamed lining membrane. Mucilaginous enemata (as of flax seed) are also useful for the latter purpose. The drink should consist of cold water, toast-water, gum-water, barley-water, etc. The diet should be restricted to milk, soda-water-and-milk, isinglass, rice, arrow-

root, cocoa, broths, ripe grapes, and other liquid forms of food—all cold. Animal food and stimulants should be avoided: when recovery has considerably advanced, eggs, white fish, particularly sole and whiting, white-fleshed poultry, fresh game, and fresh meat, may be taken, in the order recited. In chronic cases, beef-tea and other animal broths may be taken. Fruits, and succulent vegetables, except mealy potatoes, must be carefully avoided.

Preventive Measures.—Besides avoidance of the conditions pointed out under "Causes," it is necessary promptly to remove, disinfect, and bury the evacuations from a dysenteric patient, and to adopt the "Accessory" and "Precautionary Measures" pointed out in Section 46, and in Part II.

177.—Hernia (*Hernia*)—Rupture.

Definition.—A protrusion of some portion of the intestines through the walls of the abdomen, causing a swelling. The viscera most liable to protrusion are the small intestines, arch of the colon, and omentum (fold of the peritoneum).

Varieties.—The following are the most common: *Umbilical* Hernia makes its appearance at the navel, usually in infantile life; *inguinal*, in the groin, protruding through one or both abdominal rings, *above* Poupart's ligament, the spinous process of the pubes being *external* to the neck of the tumour; *femoral*, also in the groin, but a little lower than the inguinal region, *below* Poupart's ligament, the spinous process of the pubes being *internal* to the neck of the tumour; and *scrotal*, in the scrotum. *Reducible* Hernia is one that can be returned into the abdomen; *irreducible*, that cannot be returned, but without constriction; *incarcerated* or *strangulated* is so constricted that the contents of the bowel cannot pass onwards to the rectum, and the circulation of blood is impeded.

Symptoms of Reducible Hernia.—The swelling in this variety increases in size, or descends, when the patient stands erect; and diminishes in size, or even disappears, when he lies down. It is also larger after a meal, and an impulse is given to it when the patient coughs. If allowed to remain, the Hernia

may greatly increase in size by the accumulation of gas and fæcal matter, with danger of strangulation. If the protruding part return, either spontaneously or by pressure, a peculiar gurgling sound is heard.

Symptoms of Irreducible Hernia.—If the protrusion be allowed to remain, there is rapid adhesion of the sac to the areolar tissue. If this adhesion take place, or if membranous bands extend across the mouth of the sac, or if the protruding intestine become enlarged, or the opening through which it has passed become contracted, the Hernia cannot be reduced. The obstruction to the passage of fæces, and the abnormal condition of the intestine, occasion sickness, vomiting, dragging in the abdomen, colic, and constipation. These symptoms are aggravated if the patient be corpulent; more so when in a woman, and she becomes pregnant. Irreducible Hernia is generally large, and not unfrequently there is inflammation similar to that of strangulated Hernia.

Symptoms of Incarcerated Hernia.—This form is irreducible, and is characterised by the accumulation of gases, or of undigested fluids or solids, which create temporary obstruction.

Symptoms of Strangulated Hernia.—A painful, tense, and incompressible swelling, increased in size by inflammation and the accumulation of contents; flatulence, and colicky pains, with vomiting, first of food, then of bile; obstruction; desire to go to stool, and inability to pass anything, unless there be fæcal matter in the bowel *below* the seat of rupture. If relief be not obtained, Inflammation sets in, with increased vomiting, even of brown, offensive, fæculent matter; small, wiry, rapid pulse, high fever and great pain all over the abdomen; finally, mortification, with cessation of pain, and death.

Causes.—*Weakness* of the abdominal walls from disease, injury, or congenital deficiency; *violent exertion*, as in lifting heavy weights; severe exercise on foot or horseback; long-continued exertion of the abdominal muscles; *immoderate straining*, as in passing urine through a stricture, or in relieving the bowels, or in parturition.

Treatment.—No time should be lost in trying to push the tumour back into the abdomen, gentle force being exerted

chiefly upwards and outwards as the patient lies on his back with the hips raised, and the thigh on the ruptured side flexed. If not quickly successful, the patient, after evacuating the contents of the bladder and rectum, should be laid on *a board*, so placed as to form *a steep inclined plane*, that the patient's feet and hips may be very much higher than his head; he should be firmly held in this posture by an assistant, when, by gentle manipulation of the swelling, and often without any, the bowels will fall towards the chest, drawing with them the constricted portion.

The following concise directions are quoted from *Shaw's Medical Remembrancer* :—" The patient having been so placed that all the parts concerned are as much relaxed as possible, the surgeon should take the tumour gently in his left hand, and drag it a little downwards, so that the neck of the sac be not twisted or doubled up. The next manœuvre is to grasp the neck of the sac between the forefinger and thumb of the same hand, as high up as possible. The surgeon now, holding the tumour straight by the right hand, makes alternate relaxation and pressure with the thumb and finger over its neck, abstaining entirely at first from pressure on the mass. By gentle 'nubbling' in the way described, the parts concerned in the stricture may be somewhat relaxed, and the intestine or omentum at this part thinned out. When this has been effected comes the time for attempting to reduce. The neck of the sac being still held firmly in the fingers, so as to prevent its being pushed up or shortened, the tumour itself is grasped and compressed by the right hand with gentle but continuous and increasing force. There must be no kneading or pommeling; and all irregular, unmethodical attempts are liable to injure and very unlikely to succeed."

A gurgling sound will be the signal of success. Two minutes should suffice for the reduction of a small Hernia, ten minutes for a large one; longer time or forcible pressure will only damage the bowel. In whatever part of the bowel the strangulation may occur, it is of chief importance to *relax the muscles and fasciæ* which surround the openings within which the loop of intestine has been constricted; and this can be most effectually accomplished by bringing together the

points of origin and insertion. The thigh should therefore be flexed upon the abdomen, the pelvis drawn towards the thorax, the shoulder of the affected side drawn down to the crest of the ilium, and the linea aspera made to form an acute angle with Poupart's ligament. By rotation of the limb inwards the columns of the ring will be further relaxed.

After returning the Hernia, a truss should be employed, the pad of which should be of an oval shape, to exert a sufficient amount of pressure to prevent subsequent protrusion. The use of a convex pad, fitted with a kind of ball-and-socket joint, as Salmon and Ody's, gives the greatest amount of security, with the least pressure, and consequently with the least discomfort to the patient. A flat, fixed pad requires more pressure, and causes corresponding inconvenience, or even suffering, to the wearer. A truss should be worn constantly during the day-time, and applied *before* rising from the horizontal posture. The skin of the part on which it presses should be washed daily, and for the first few weeks bathed with *Eau-de-Cologne* or spirit-and-water, to prevent excoriation and the formation of boils.

Mr. J. Wood relates several cases of radical cure through uniting the sides of the sac and the aponeurotic structures by means of a handle-curved hernia-needle and silver wire. When it is remembered that the state of the strangulated bowel, and not any operation upon the peritoneal sac and parietes, is the source of danger, it is surely advisable thus to guard against a return of the protrusion.

If the rupture resist the measures just recommended, an operation may be necessary to save the life of the patient. In the meantime *Acon.* and *Nux Vom.* should be administered every fifteen or twenty minutes in alternation. *Bell.*, *Opi.*, *Æscul.*, *Lyc.*, and *Ver.-Vir.* are also recommended.

The operation for strangulated Hernia consist in the division of the stricture, so that the bowel may be returned by very gentle manipulation. If the contents return with the characteristic gurgle, success is assured. If not the sac must be opened, its contents carefully examined, flatus and fæces allowed to escape, and great judgment and care exercised in replacing the intestine.

The Umbilical Hernia of Infants may be reduced and retained without the employment of a truss. The child being placed on his back, and the protrusion pushed in with the finger, the skin on either side of it may be pinched up in two folds so as to meet over and cover it. These folds may be kept in close apposition by strips of diachylon plaster, four transverse, two oblique; and these are kept in place by the bellyband. Every three or four days the strips of plaster may be changed one by one. The bowel is thus kept in place, and probability of protrusion when the child cries or coughs is much lessened.

178.—Parasitic Disease of the Intestines (*Morbus parasiticus intestinorum*)—Worms (*Entozoa*).

There are *fifty-five* well-marked parasites which infest the human body. Of these, thirty-five live *within*, hence are called *Entozoa;* and eight live *upon* or *outside* the body, and are called *Ectozoa* (see the Section, "Parasitic Diseases of the Skin"). There are twelve other parasites which are of *vegetable* growth, and are called *Entophyta* or *Epiphyta*, according as they live within or upon the body. There are many others which have been reported, but their characters or existence are still the subject of inquiry. Even the parasites themselves are infested with parasites—"an observation embodied in the Hudibrasian couplet:—

> 'These fleas have other fleas to bite 'em,
> And these fleas, fleas, *ad infinitum*.'"

The parasites of man are divided into three classes:—*Cœlilmintha*—hollow worms—worms with an abdominal cavity; *Sterelmintha*—solid worms; and *Accidental Parasites*—internal parasites, having the habits, but not referable to the class, of entozoa. The round-worm and thread-worm are examples of the first class; the tape-worm, of the second; and the larva of the gad-fly, of the third class. There is scarcely a tissue or organ of the body that has not been invaded by parasites: by far the greater number of the *entozoa* dwell in the intestines; but many are found elsewhere—the

Guinea-worm in the skin and subcutaneous tissues, the *Trichina Spiralis* and *Cysticercus Cellulosæ* in the muscles, and others in the eye, kidney, liver, brain, heart, etc., and even in the blood.

The three most common parasites are the following:—the *Oxyuris vermicularis* (the small thread-worm); the *Ascaris lumbricoïdes* (the long round-worm); and the *Tænia solium* (the common tape-worm of this country); the latter is least frequent, and is very rare in children till after the third year.

The Oxyuris, from a quarter of an inch to nearly an inch long, is the smallest worm that infests the intestines, and often exists in clusters, rolled up in masses of considerable size, throughout the colon, especially in the cæcum. They are threadlike, white, move very rapidly, and when touched contract to one-half their usual size. The term "maw-worm" is sometimes applied to them, from the irritation caused in the stomach by a reflex action. They do not exist in infants fed at the breast, unless other food, especially starch food, is also given, but are met with in older children, and not unfrequently in adults. They are found all over the world, but abound in Egypt and Greenland. The *symptoms* to which this variety gives rise are,—itching or irritation about the anus, especially troublesome in the evening, depraved or irregular appetite, offensive breath, picking of the nose, puffiness of the face, straining at stool, disturbed sleep, and more or less general restlessness. The local irritation excited may be very considerable, extend to contiguous parts, and occasion a mucous or bloody discharge from the vagina, and even operate as a cause of Masturbation. The same result may occur from direct migration of the worms from the anal to the vaginal or urethral orifice. The frequent but ineffectual desire to go to stool may occasion straining and Prolapsus Ani, effects which may continue after the expulsion of worms. When the presence of thread-worms is suspected, they may often be found on examination of the stools, or crawling about the radiating folds of the anus after the patient gets warm in bed.

The Ascaris Lumbricoïdes is very similar to the common

earth-worm, but of a paler colour, sometimes almost white. It is of variable length, from six to fifteen inches, inhabits chiefly the small intestines, where it feeds on the chyle, but not unfrequently passes into the stomach and is vomited; or downwards into the colon and is ejected with the evacuations. It has been seen in the gall bladder and hepatic duct; has visited the œsophagus, pharynx, and glottis; and has been found in the air-passages, coming by way of the œsophagus and trachea, causing death by strangulation. When existing in large numbers the worms cause much irritation, and are occasionally passed in bunches or balls rolled together. It seldom exists alone, and is said to be most common in ill-fed children between the ages of three and ten years. It is exceedingly prolific, a moderate calculation showing that the yearly production of ova from a single worm may be 60,000,000, or more than 160,000 a day; so that the discovery of eggs in the fæces by means of the microscope is not a very difficult matter. The chief symptoms are,—pain and swelling of the abdomen, depraved appetite, fœtid breath, slimy stools, tenesmus, itching of the anus, and sometimes chronic Diarrhœa, most troublesome at night, with offensive, scanty, thin motions, much straining, and often prolapse of the bowel. Nervous symptoms are also common,—pallid countenance, dilated pupils, Vertigo, disturbed sleep with grinding of the teeth, Convulsions, Chorea, etc. These symptoms may, however, be due, in part at least, to the general functional derangement which favours the production of the parasite, and not alone to direct irritations.

The Tænia* Solium is white, articulated, flattened, in the form of a ribbon; varies in length from a few feet to many yards; and has its habitat in the small intestines. Although commonly one, two, or three only are found, yet various and considerable numbers may be present together. It has been said that, if any segment of the tænia be left in the bowel, it will become a perfect worm; but this is not the case. If the

* Dr. Parisi of Athens recommends the milk and pulp of one cocoa-nut taken in the morning whilst fasting. He says it requires no purgative, and will cause the worm to come away entire and dead. This he has proven upon himself and many patients (*Medical Annual*, 1892).

segment be fully developed, and find a suitable nidus, it does not produce other segments, but the contained germs escape, and, passing through their physiological changes, become perfect worms. The symptoms produced by its presence are not often well-marked, and it is usually unsuspected till joints are passed in the evacuations ; frequently, however, there are sensations of weight, or gnawing in the abdomen, often with enlargement about the navel. The appetite is usually excessive, but at the same time the nutritive functions are so imperfect that there is considerable and progressive wasting. There is often itching of the nose and anus, lassitude, and sometimes cramps in the extremities.

The Tænia Mediocanellata is a species of tape-worm common in India, especially among the lower classes of the Mussulman population, who prefer to eat their beef only half-cooked. It is very similar to the *T. Solium.* The tape-worm is more likely to produce decided impairment of health than any other species.

General Symptoms.—The existence of worms is usually preceded and accompanied by an unhealthy condition of the mucous lining of the intestines, in which a large quantity of tenacious slimy mucous is secreted, which interferes with the various processes concerned in digestion, and at the same time forms a suitable nest for intestinal worms, in which they develop rapidly in proportion to the quantity of mucus secreted. Intestinal worms require thick mucus both for their nidus and nourishment. The clear recognition of this fact is of great importance, for when the alimentary canal is brought into a healthy condition, there is no home for worms, and they soon cease to infest the patient.

This condition of the intestinal canal is indicated by a coating of the tongue which varies in degree according to the extent of mucus secreted, with remarkable distinctness of the fungiform papillæ at the sides of the dorsum. These papillæ are seen as large, round, or, more commonly, oval spots, seldom elevated, and varying in colour from pale red to deep crimson, the depth of colour being in proportion to the degree of irritability of the digestive organs. If vomiting and Diarrhœa supervene, their colour becomes bright red, and

they then project slightly above the surface, peering through the thick coating of yellow fur with which the dorsum in such cases is usually covered. Although the appearance of the tongue thus described is not diagnostic of worms, yet it indicates a condition of the digestive organs in which worms are very likely to be found, and when it is noticed, worms should always be inquired for. When the tongue is seen to have a slightly slimy look, especially about the centre, to be covered with a thin coating of greyish transparent fur, and to have the fungiform papillæ at the sides—large, oval, not elevated, but pinkish red, and unusually distinct—worms are seldom absent (*Dr. Eustace Smith*).

As a result of this condition of the alimentary canal, the function of nutrition becomes impaired, and the patient loses flesh, while the abdomen becomes hard and swollen. The face is puffy and pale, the skin greyish, with a leaden-coloured semicircle under the eyelids; the pupils are dilated; there is itching of the nose and anus, and occasionally tenesmus; the bowels may be confined, with constant ineffectual efforts, or there may be attacks of Diarrhœa, with great straining, the motions being dark, slimy, and offensive; the breath is disagreeable, especially in the morning, and there is sometimes dribbling of saliva during sleep. The appetite is capricious, often ravenous, and sometimes the patient refuses food altogether. Discharges of mucus are not infrequent from the rectum, and also in girls from the vagina. Sometimes the urine is passed with difficulty or pain, the urine being usually whitish or milky.

Other disordered conditions, of a nervous character, are, restlessness, starting during sleep, grinding of the teeth, a dry, short, irritative or spasmodic Cough, sighing, Hiccough, and in children of a refined nervous temperament, Convulsions.

The only certain proof, however, of the presence of worms, is the detection of the creatures themselves, or their ova, in the stools or matters vomited. Even when thus known to exist, the symptoms for which advice is sought may not be due to the worms. In such a case, an injection or purgative will expel the parasites, but the symptoms will still persist.

CAUSES.—Our knowledge of the *modus operandi* by which these parasites get access to the intestinal canal is as yet imperfect. The *Oxyuris* effects an entrance into the human body with vegetable food or water whilst in an immature condition. Unfiltered, impure water is no doubt the medium by which the *Ascaris lumbricoïdes* is introduced. The revelations of the microscope prove that water often contains animalculæ, or their eggs, which, though extremely minute, may give rise in the human intestine to a living creature. Eating imperfectly-washed vegetables, raw or under-cooked meat, etc., affords another channel. Flesh infested with the *cysticercus* is the ordinary source from which the *Tænia* are derived. Pigs are very liable to be so infested, and in rabbits it is exceedingly common, very few of these animals being found altogether free from this parasite (*Dr. Eustace Smith*).

The theory of the *spontaneous generation* of intestinal worms is opposed to the investigations of the most scientific naturalists of the present day. Food in a semi-assimilated condition, with the presence of mucus in the intestines, forms a nidus favourable to the development of parasites; but there has been no evidence of the existence even of the simplest form of living beings, except through the instrumentality of a previously-existing principle. The microscope shows that the entozoa have male and female organs, and produce fertile eggs in abundance. The eggs of course require for their development certain favourable conditions, but these conditions are not the cause of their production.

The identity of the Tænia with the *cysticercus* found in the muscles of the lower animals has been established by Siebold and others, and it is probable that the *trichina* is subject to similar developments.

The *predisposing condition* which favours the development of worms, already noticed, is the secretion, in great abundance, of intestinal mucus, causing fermentation of food and imperfect digestion and assimilation. Struma is a predisposing cause, for the unhealthy condition of the lining of the digestive tube that prevails in this disease is highly favourable to the development of worms.

Worms Infectious.—Thread-worms often migrate from the rectum into the vagina of little girls, preferring the night for this purpose; they may even migrate from the child affected to others sleeping in the same bed. The female worm is the greatest traveller, and one pregnant worm, escaping from its place of development into another intestinal canal, is capable of infecting it. In this manner worms are infectious, and an entire family, where parents and children occupy the same bed, as they too often do among the poorer classes, become infested with *oxyuri*.

Treatment.—This does not embrace simply the expulsion of the parasites from the body, but the correction of the abnormal state of the digestive canal, and the destruction of the nidus in which they live and multiply. When *oxyuri* are very numerous and troublesome, and their immediate removal is desirable, we recommend simple injections.

Injections.—These are useful as means for expelling thread-worms, after they have been driven down into the rectum and sigmoid flexure; half a pint of water, in which a teaspoonful of common salt has been dissolved, once or twice repeated, will generally suffice, or oil of *turpentine* may be added to warm water—*one drop* to the *ounce*. The injection should be administered in the evening at bed-time, and when the bowel is empty, so that the salt water may find ready access to the various ramifications of the bowel where the parasites hide. Afterwards a simple cold or tepid injection should be used regularly two or three times a week for one or two months, to wash away the slime and mucus in which the ova exist. Injections of *garlic* (not onion), *limewater*, *quassia*, and *perchloride of iron*, *aloes*, *corrosive sublimate*, or *cold water* and *vinegar*, have been found very efficacious. *Sweet-oil* is a less disagreeable injection, and often rids the patient of the worms in about ten days. But only the medicinal and general treatment can be relied upon for improving the health and preventing their reproduction.

Epitome of Treatment.—

1. *As Anthelmintics.*—Cin., Ac.-Cup., Filix Mas. ϕ, Teuc., Urt.-U., Sant., Kousso. Infusion of Pomegranate rind.

2. *For constitutional conditions commonly associated with worms.*—Ars., Calc.-C., Sulph., Sil., Merc., Ant.-C.

3. *Occasional remedies.*—Acon. (*feverishness and restlessness*); Bell. (*flushed face, nervous irritability, convulsions*); Nux V., Chin., *or* Puls. (*Indigestion*); Ign. (*nervous depression, local irritation, Prolapsus Ani*); Ferr. Mur. (*anæmia*).

Leading Indications.—

Cina.—A valuable remedy for the condition which favours the development of *thread-worms*, or round-worms, or even tape-worms, with the following symptoms:—boring at the nose, livid semicircles under the eyes, tossing about, or calling out suddenly during sleep, Epilepsy or Convulsions, nausea and vomiting, griping, itching at the nose and anus, and white, thick urine, sometimes passed involuntarily.

Santonine.—Is confessedly a genuine specific for all the larger kinds of nematoid parasites.

Mercurius Cor.—This remedy is indicated more by the character of the evacuations than by the presence of parasites. The motions are whitish or greenish, pappy, and sometimes bloody, with tenesmus; there may be also distention of the abdomen, *fœtid breath, excessive quantity of saliva*, difficult teething, restlessness at night, etc.

Teucrium.—Thread-worms with much irritation in the rectum, irritability of the nervous system, sleeplessness, Vertigo, etc. It is especially efficacious in *adults*.

Ignatia.—Suitable for mild, sensitive children, troubled with excessive *itching of the anus, Prolapsus Ani*, nervousness, depression, epileptiform attacks, etc.

Filix Mas.—This remedy is chiefly employed against the *tape-worm*, and if continued for some time, twice a day, often effects a cure.

Urtica Urens.—Excessive *itching of the anus*, especially at night from thread-worms.

Curcurbita Pepo is said by Dr. Burt to be specific and special poison to the *tape-worm*, and more reliable than any other remedy.

Kousso has the recommendation of Baehr. It is used in Abyssinia as a quick and good vermifuge for *Tænia*. The

flowers and tops of the plant (*Brayera Anthelmintica*)—two or three drachms—are infused in a tumblerful of warm water, well stirred, and allowed to stand all night. A cup of coffee should be first taken in the morning, to prevent nausea; then one-half of the infusion, and the remainder half an hour afterwards. Lemon-juice will correct subsequent retching. The parasite will be discharged in two or three hours. Mr. Nankivell finds grain-doses, four times a day, effective.

Ant.-Crud.—This remedy is particularly recommended for the correction of that morbid condition of the intestinal canal which favours the development of worms.

China.—Suitable for the treatment of children with thread-worms and tendency to Diarrhœa, irritation at the anus, pallor of the face, and livid appearance under the eyes.

Sulphur.—Worm-colic; also after the general symptoms have disappeared, to complete the cure. See also *Calc.*

Calcarea.—After discontinuing the other remedies specially and immediately indicated, this is generally required for patients having an hereditary predisposition to worms, with other scrofulous symptoms.

Teste recommends a course of medicine which has been found efficacious, as follows: *Lyc.* 30, for two days; *Ver.-Vir.* 12, for four days; *Ipec.* 6, for seven days.

Local Means.—The propagation of the most common varieties of worms—the *Ascaris* and the *Oxyuris*—may be prevented by the simple application of *lard* or *oil* around the *anus* of the patient. It has been observed that light and air are necessary to the propagation of some varieties of intestinal worms in horses and other animals, and Mr. Haserick, of America, states that the female holds on or grasps the mucous membrane within the *sphincter ani*, and then discharges its eggs around the *anus*; in a few hours these are hatched and make their way into the rectum. He has found that the application of lard around the anus destroys the larvæ, and that by renewing the application two or three times a day for a week, the surface is completely protected, and the egg has no nidus for development; consequently, as the worm is short-lived, in the space of eight days the animal is free from parasites. Encouraged by his success with animals, this gentleman

recommends similar measures in the case of children, and with the prospect of equal success.*

Dr. Hills and Dr. Grosvenor have advised this treatment in many cases, with the best result in every instance.

DIET, ETC.—To correct the excessive and morbid intestinal secretion, considerable changes of diet are generally necessary. The food should be taken only at regular hours, and be selected with special reference to its digestibility; it may include properly-cooked animal food—mutton, beef, fowl—also white fish. Cakes, pastry, sweetmeats, sweet-made dishes, potatoes (except prepared as afterwards recommended), butter, veal and pork in any form, must be forbidden. Salt, as a condiment, should be taken freely with the food; but salted meats should be avoided.

The following scale of diet is recommended by Dr. Eustace Smith for a child over two years of age, to be given in four separate meals in the course of the day:—

"*First Meal.*—Fresh milk diluted with a third part of lime-water. A small slice of toast, or of dry, stale bread.

"*Second Meal.*—A small mutton chop, or a slice of roast beef or mutton, without fat; dry toast or stale bread.

"*Third Meal.*—A cup of beef-tea or mutton-broth, free from grease; the yolk of a lightly-boiled egg; dry toast.

"*Fourth Meal* (*if necessary*).—The same as the first. It is not always easy to persuade children to submit readily to the deprivation of starchy food, for which, and especially for potatoes, there is often in these cases a great craving. So long, however, as the slimy appearance of the tongue, before described, continues to be observed, the above diet should, if possible, be adhered to. When

* Dr. Woodvine, of Boston, confirms Mr. Haserick's theory. "After many attempts," he states, "I succeeded in satisfying myself that the method by which the *oxyuris vermicularis* propagates its species, is by depositing the ova outside the sphincter ani and around the edge of the anus, where, in the space of a few hours, the worms are hatched, and make their way into the rectum. In order to ascertain if the ova are thus deposited, I directed the parents of the child afflicted with the oxyuri, a few minutes after a paroxysm of itching and pricking pain in the rectum had subsided, to take a piece of damp black silk, and, wiping the anus of the child with it, fold it, and send it to me. To the naked eye nothing appeared on the silk more than a little mucus. This I placed in a microscopic cell, and under a one-fifth objective found that, on several occasions, I had succeeded in obtaining large numbers of the eggs, thus confirming the observation of Mr. Haserick."

potatoes are once more allowed, they must be well boiled, and should be afterwards carefully mashed with a spoon. *Steaming* is generally the best method of cooking potatoes. Gravy may be poured over them before they are eaten. In cases where the appetite is lost and there is disgust for food, children often show an especial reluctance to take meat, which it is very difficult to overcome. A small bird, as a lark or a snipe, will however often tempt them, for their fancy is pleased by the idea of eating a whole bird, and this means frequently succeeds when all others fail.

"The above scale of diet need not be literally followed in the case of all children troubled with worms, but may be varied according to circumstances. In general three meals are better than four; but whichever arrangement is adopted, no food should be allowed between the meals."

General Measures.—The general hygienic management of children should be conformed to the best principles: children should be quickly bathed with cold water on rising in the morning, and afterwards rubbed with a large towel or bath-sheet till the whole skin is in a glow. An occasional warm bath at night is advantageous by aiding the healthy action of the skin. Open-air exercise should be taken daily, and when improvement has taken place, change of air to the coast or to a bracing neighbourhood is desirable, if only for a short time. Change of air tends to perfect and render permanent the treatment recommended.

Prevention of Worms.—1. Open waters should be avoided, either for drink or for use in the preparation of food, especially those into which the carcases of animals are thrown, or into which worm-eggs may be washed by rain, or other agencies, or to which even dogs or other animals have access. All suspected water should be previously boiled, distilled, or *well filtered.* 2. Decomposing pieces of meat should be destroyed by *fire;* if thrown to dogs, or allowed to accumulate on the ground, or even buried, worms are propagated, and human health and life endangered. 3. Raw or underdone meat, especially ham, bacon, sausages, etc., should be carefully avoided. Cooks, butchers, etc., are more liable to be infested with *tænia* than other persons; and in countries where uncooked flesh, fowl, or fish is consumed, worms abound. Good cooking ranks next in importance to the attempt to exterminate parasites from the animals we eat, or the water we drink. 4. Dessert fruits, and any vegetables, eaten raw, should be first most scrupulously washed and examined, as it is through

such media that the ova of parasites often find their way into our bodies. After being *thoroughly cleansed*, they should be well masticated before they are swallowed. 5. Great personal cleanliness, ablutions after defecation, frequent change of body- and bed-linen, beating of bedroom carpets, and washing of floors, are also to be enforced. Dr. Cobbold asserts his belief that if even the daily local use of water be persevered in, it will obviate a return of the disorder.

The Guinea Worm (*Filaria medinensis*) is essentially a tropical parasite, endemic in India, on the shores of the Persian Gulf and Caspian Sea, in Arabia Petrea, Upper Egypt, Abyssinia, and Guinea, and on the Island of Curaçoa.

It abounds during the hot and rainy season; has a period of incubation of about twelve months, during which it is latent and produces no irritation in the system; and never manifests itself until the second season of residence in the locality where it is endemic.

Only one is usually present in the body at once, or is known to be making its exit at one time; though there are exceptions to this rule.

Symptoms.—After the period of incubation, when the worm becomes mature, it burrows its way to the skin, and from the upper part of the body to the lower extremities. Although it has been found in different parts, it has been extracted in the majority of instances from the legs and feet. It can be distinctly felt as a piece of cord under the skin. The first signs of its presence, however, are pricking, itching heat, felt for several weeks where the worm lurks. A small vesicle then forms, rapidly enlarges, if opened is found to contain clear, limpid fluid, but if untouched becomes an angry ulcer full of turbid, sometimes bloody, serum, containing young *filaria*. After some weeks the worm itself protrudes. The ejection of the young may be promoted by gently pouring a constant stream of water over the blister, when the sac of the worm will protrude, dilate, and emit an innumerable number of young *filaria*. The process may be repeated for some days, and ultimately, when the emission ceases, the parasite may be removed. Indeed, the liking of the creature for water has been observed by the natives, and utilised as a means of

extraction. For when the worm appears they place the limb in the current of a stream, and the gentle force of the running water stimulates the worm to come out, when it can be gently pulled away. It may be removed by winding it out on a stick a little every day; or it may be excised.

Propagation. — From regimental statistics and medical observation it appears that the worm is caught by bathing in tanks or places where the young and impregnated females abound. There is some probability that the "tank-worm" is identical with the "Guinea-worm." But how the transformation takes place, or how the worm enters the human body, is not clearly known.

Dangers.—In most cases, there is considerable destruction of the tissues by sloughing of the ulcers; sometimes there is deep-seated inflammation with the formation of abscesses and sinuses. Death rarely ensues; but there is generally great annoyance, distress, and debility. Still, cases are on record where copious discharges, or the bursting of internal abscesses, have proved fatal.

179.—Diarrhœa (*Cholera simplex*)—Purging.

Definition.—Frequent, *excessive*, fluid evacuations from the bowels, without *tormina* or straining, from functional or structural changes in the small intestines, of a local or constitutional origin.

Simple frequency of evacuation may exist while there may be no increase in the quantity of fæcal matter discharged, or it may even be deficient. Diarrhœa really depends upon defective absorption by the intestines, so that more than a healthy proportion of matter passes through them, and less is taken up for the nourishment of the body.

Forms.—The following are the chief: *Irritative Diarrhœa*, from excessive, stimulating, irritating, or impure food or drink; *Congestive or inflammatory Diarrhœa*, from cold, cold drinks or ices when the body is overheated, checked perspiration, or suppressed accustomed discharges; *Diarrhœa lien-*

terica, or discharges of unaltered food from arrest of the digestive and assimilative functions; and *Summer-diarrhœa*.

Symptoms.—Nausea, flatulence, griping pain in the bowels; followed by loose motions, which may vary as regards consistence—being fluid or watery; in their nature—slimy, bilious, or bloody; and in their odour and colour. Furred tongue, foul breath, and acrid eructations, are generally superadded. The circulation, breathing, and other functions are usually unaffected. In *Summer-diarrhœa*, or *English Cholera*, the discharges are chiefly bilious, and there are often violent pains in the abdomen, Cramps in the legs, and great prostration. *Chronic Infantile Diarrhœa* often begins very insidiously, and is overlooked until the loss of flesh, colour, and activity leads to the conviction that some secret disease is undermining the system. A mild form of the disease may exist without attracting notice for weeks or even months; but with the setting in of more decided symptoms, emaciation advances; food, eagerly taken, is passed in an undigested state; the evacuations become excessively frequent, fifteen or twenty in the twenty-four hours; the skin is dry and harsh, the features pinched, and the bones projecting. Thrush, and soreness of the buttocks, may precede death.

Causes.—1. *Excess in the Pleasures of the Table.*—Over-repletion of the stomach may occasion irritation and Diarrhœa by the mere quantity of the aliment introduced, but these results more commonly follow the mixture of various kinds of food and drink in one meal.

2. *Indigestible kinds of food.*—Such are, especially—sour, unripe, or decaying fruits or vegetables; badly-cooked food; fatty and rich food; various kinds of shell-fish; putrid or diseased animal food. The most fruitful source of Infantile Diarrhœa is improper food, especially farinaceous, which is often most unwisely given, almost as soon as there is the ability to swallow. The constant passage of indigestible starchy masses along the intestinal canal causes irritation of the sensitive mucous lining, which sooner or later expresses itself in Diarrhœa. Sour milk, an inferior quality of maternal milk, or the addition of sugar to the milk, are equally prejudicial.

3. *Impure Water.*—This is the fruitful cause of Diarrhœa. Water contaminated with sewage or sewage gases, or with decomposing animal matter, is almost certain to occasion Diarrhœa, especially in recent visitors to a neighbourhood supplied with such water.

4. *Atmospheric Influences.*—The heat of summer, the hot days but chilly nights and mornings of autumn, are frequent exciting causes of *Diarrhœa;* so is the application of cold to the perspiring body, or other sudden check to perspiration. Hot weather is a frequent exciting cause of *Diarrhœa*, termed, on this account, *Summer or English Cholera.* Dr. Farr says that *Diarrhœa* "is as constantly in English towns when the temperature rises above 60°, as *Bronchitis* and *Catarrh* when the temperature falls below 32°." Probably, to the influence of the change of temperature—from the excessive heat of the day to the cool of the evening in the autumnal months—may be added that of bad drainage, and the impurities which then exist in our rivers and springs.

5. *Mental Emotions.*—The depressing influences of fear or anxiety, or the violent excitement of anger, are frequent exciting causes. A sudden fright excites in many persons the action of the bowels as certainly as, and much more quickly than, a "black-draught."

6. *Functional or organic disease.*—Diarrhœa is often a symptom of other diseases arising from local or constitutional causes, as in Enteric fever, Remittent fever, and Phthisis. It is called *colliquative* Diarrhœa, because it appears to *melt down* the substance of the body; *cachectic* Diarrhœa, when it arises from chronic malarious diseases; *bilious* Diarrhœa, from excessive flow of bile, as in hot weather or after passing a gall-stone. Looseness of the bowels is a very common precursor of Cholera when that disease is epidemic.

7. *Pregnancy, inducing nervous irritation.*—Diarrhœa sometimes follows conception so closely, that the patient has her attention first drawn by it to her condition, and it may return regularly every month, as though it were vicarious of menstruation.

Treatment.—The attempt to arrest Diarrhœa by the astringent measures of the old school has, in many ways, a

most prejudicial effect; for should one symptom be relieved, it is too frequently followed by aggravation of others. When loose evacuations afford relief, they should not be interfered with, for they may be Nature's mode of eliminating disease. The evacuations following the too free indulgence of the table, or those of children during teething, are of this class.

Epitome of Treatment.—

1. *Diarrhœa from indigestible food.*—Puls., Ant.-C., Ipec., *or* Nux V.

2. *From impure water and effluvia.*—Bapt., Ars.

3. *From fruits or acids.*—Ars., Coloc.

4. *From cold and hygrometric changes.*—Camph. (*with severe chills*); Acon. (*from suppressed perspiration*); Bry. (*changes from hot to cold weather*); Dulc. (*damp*); Coloc. (*with Colic*).

5. *Summer Diarrhœa.*—Chin. (*simple*); Ver.-Alb. (*with Cramps*); Iris (*with vomiting and Headache*); Ars. (*great prostration*); Ac.-Phos. (*epidemic summer and autumnal Diarrhœa*).

6. *From mental causes.*—Ign., Ver., Cham., China.

7. *During Dentition.*—See Section 156.

8. *In weak and aged persons.*—Phos., Ac.-Phos., Ant.-C., Ac.-Nit.

9. *Chronic Diarrhœa.*—Ars., Phos., Calc.-C., Ac.-Phos., Iod., Chin., Sulph., Fer.-Iod., Ac.-Nit.

10. *Other conditions.*—Ipec. (*with vomiting*); Ferr., China, *or* Ars. (*undigested food in the stools*); Rumex, *or* Nuph. (*morning Diarrhœa*); Merc.-Cor., Caps., *or* Ipec. (*bloody discharges:* see also Section 176); Podoph., Merc., China., *or* Iris (*bilious Diarrhœa*); Rubini's Camphor (*choleraic Diarrhœa; tetanic Cramps*); Collin., Zinc.

Leading Indications.—

Camphor.—In sudden and recent cases, with chilliness, shivering, cold creeping of the skin, severe pain in the stomach and bowels, cold face and hands. Two drops on a small piece of loaf sugar, repeated every twenty or thirty minutes, for three or four times.

Dulcamara.—Diarrhœa from cold and *wet*, particularly in the summer or autumn; nocturnal evacuations, which are slimy or bilious; impaired appetite and dejection of spirits.

Pulsatilla.—Purging from fatty or rich food, bitter taste in the mouth, nausea, eructations, and colicky pains, especially at night; *mucous Diarrhœa*, especially in children.

Ant.-Crud.—Watery Diarrhœa, with disordered stomach, loss of appetite, white-coated tongue, eructations, and nausea. It is more especially adapted to the aged.

China.—Simple summer Diarrhœa; also after eating, or in the night, or early morning, and containing undigested food, painless or with Colic; brownish motions; debility, thirst, and loss of appetite.

Apis.—Painless, greenish-yellow Diarrhœa recurring every morning.

Iris Versicolor.—English Cholera or Summer-diarrhœa; *Cholera Infantum;* bilious evacuations, with vomiting and Headache.

Arsenicum.—Diarrhœa accompanied or ushered in by vomiting, with heat in the stomach, and a *burning sensation* attending the effort of expelling the motions, with griping or tearing pains in the abdomen. It is well indicated in Diarrhœa with extreme *weakness*, *emaciation*, coldness of the extremities, pallor, *sunken cheeks*, etc. It is therefore more suited to Diarrhœa associated with deep-seated disease than to mere functional disorder.

Mercurius Cor.—Bilious or bloody stools, preceded by Colic and griping, and followed by painful straining: also clay-coloured or yellow stools.

Bryonia.—Diarrhœa during the heat of summer, especially if caused by cold drinks, or by sudden change from heat to cold wind.

Collinsonia. — Diarrhœa alternating with Constipation; *Piles.*

Podophyllum.—Dysenteric and bilious Diarrhœa, with prolapse of the bowel. In children, profuse, sudden, fœtid, exhausting discharges, worse in the morning and forenoon; retching; drowsiness; rolling and perspiration of the head; restlessness.

Aloes.—Diarrhœa, with feeling of uncertainty as to the power of retaining the contents of the bowel.

Veratrum.—Copious, dark, watery evacuations, with *Cramps*,

great thirst, vomiting, coldness of the body, and rapid sinking.

Acid.-Phos.—Chronic, exhausting, painless Diarrhœa, particularly when there is involuntary action of the bowels.

Phosphorus.—Weakly, nervous patients, especially young persons with a tendency to Phthisis. *Iodium* is also valuable.

Ferrum.—*Anæmic* patients; chronic Diarrhœa, with undigested food.

Oxide of Zinc.—For the Diarrhœa of infancy Dr. D. J. Brakenridge recommends one grain of the *oxide* to be taken after meals, either as a simple powder, or mixed with mucilage and water. He mentions a goodly number of cases in illustration of its efficacy.

Calcarea Carb.—*Chronic Diarrhœa*, with weakness, emaciation, pale face, and sometimes variable appetite. It is especially useful in scrofulous persons.

Croton Tig., *Bovist.*, *Apocy.*, *Rheum*, *Mag. Carb.*, *Petrol.*, *Ac. Benz.* are additional remedies.

Diet.—In recent cases of *Diarrhœa*, food should be given sparingly, consisting of light, non-irritating articles—gruel, rice, arrowroot, arrowroot biscuits, Neave's food, prepared with an extra quantity of milk, and other farinaceous substances, which should be taken *cool*. The temperature of food is very important; cold milk-and-lime-water will often arrest *Infantile Diarrhœa*, when warm milk would be useless. If in such cases sickness be superadded, all preparations of milk may have to be suspended for a few hours, and whey, veal-broth, water, or barley-water, substituted. In *chronic Diarrhœa*, the diet should be nutritious, but restricted to the most digestible kinds of food—mutton, chicken, pigeon, game, and white fish are generally suitable, if not over-cooked. Beef, pork, veal, and all tough portions of meat, should be avoided. Starchy foods—arrowroot, sago, etc.—are insufficient for prolonged cases of Diarrhœa, but are improved by mixture with good milk. *Old* rice, well cooked, with milk, taken directly it is prepared, is excellent nourishment. Raw or half-cooked eggs, and wholesome ripe fruit in moderation, may generally be taken. Mucilaginous drinks—barley-water, gum-water, nitric lemonade, linseed-tea, etc.—are the most

suitable (see Sec. 28). Probably, however, *milk-and-lime-water*, as recommended by Dr. T. K. Chambers, is the best diet; it may be iced in feverish conditions; soda-water may be occasionally substituted for lime-water. Restricting a patient entirely to this diet is often alone sufficient to cure all kinds of Diarrhœa not depending on a permanent chronic cause. Even in the latter case, much temporary benefit is gained. The alkaline milk diet may be taken frequently and in small quantities.

Accessory Means.—The extremities should be kept warm, and exposure to cold or wet avoided. Rest, in the recumbent posture, is desirable in acute cases. Severe griping pains may be relieved by heated flannels applied to the abdomen, dry, or wrung out of *hot* water. In Infantile congestive Diarrhœa, caused by excessive heat, Dr. Makenna relies on cold affusions. The child is undressed and placed on a dry mattress covered with a sheet, and bathed after every motion with iced water, iced milk or water being given internally. This treatment is said to arrest the Diarrhœa *immediately*. Persons liable to Diarrhœa should wear a flannel abdominal-belt. Night air and late hours predispose to attacks. Except in severe cases, moderate out-of-door exercise should be taken daily. On recovery from Diarrhœa, relapses should be averted by shunning all exciting causes in food, clothing, mental excitement, and excessive or prolonged exertion.

180.—Colic (*Colum*)—Spasms of the Bowels.

Definition.—Violent contraction (*Spasm*) of the muscular fibres of the colon, without inflammation or fever. Sydenham and older writers designated it by the popular term, *Belly-ache*.

Symptoms.—Severe twisting griping pain in the abdomen, chiefly around the navel, relieved by pressure, so that the patient doubles himself up, lies on his belly, or rolls on the floor, writhing in agony. The bowels are generally constipated, but there is a frequent desire to relieve them, although little passes but flatus; there is no fever, nor is the pulse even

quickened, unless after a time it becomes so from anxiety. The paroxysms of pain are owing to the efforts of the bowel above to force downwards the mass of accumulated gas or fæces, while the lower portion is contracted.

Diagnosis.—Colic is sometimes mistaken for *Enteritis*, and for *Hernia*; but it may be distinguished as follows:—In *Colic*, there is no fever, no acceleration of the pulse, no serious apprehensive anxiety, the pain is relieved by pressure, and there are intervals of almost complete relief. *Enteritis*, on the other hand, is attended with fever and *extreme tenderness of the abdomen*, causing the patient to avoid any movement which would bring into action the abdominal muscles, so that he breathes by the chest alone; and although there are *paroxysms* of severe pain, there are no complete intermissions. *Hernia* is characterised by a tumour, which is absent in Colic.

Causes.—Errors of diet, such as eating a mass of heterogeneous, acrid, indigestible food, or acid fruits; Cold, from wet feet or suppressed perspiration; worms; Constipation; etc. It may also arise from Stricture of the intestines.

Treatment.—*Colocynth.—Cutting, griping*, or *intermittent* pains, extremely severe, with flatulence or Diarrhœa; followed by tenesmus, centric Neuralgia. Distended abdomen.

Nux Vomica.—Spasmodic flatulent *Colic*, with pain as if the bowels and bladder were pressed upon with a cutting instrument; irregularity in the action of the bowels. Also to correct the tendency to recurrence.

Chamomilla.—In women and children; pinching and twisting pain; soreness of the bowels; nausea. Atony of the mucous membrane and glands of the stomach and intestines, causing Indigestion. Peripheral Neuralgia.

Iris Versicolor.—Severe flatulent Colic. Colic often yields to this remedy after *Nux V.*, *Coloc.*, *Cham.*, etc., have failed.

Veratrum.—Severe crampy pains, with coldness of the whole body; flatulent Colic, especially in the night; Colic affecting the whole abdomen, with swelling and loud rumbling.

Bryonia.—In less severe Colic, when, in addition to fulness and distention of the bowels, there are sharp stitching-pains in the sides or in the bowels, with irascibility.

Belladonna.—Paroxysmal Colic, griping, and sensation as if

a ball or lump were forming; there may be distention of some part of the abdomen; redness of face, with straining, especially in children.

Plumbum.—Violent constrictive shooting or pinching pains in the region of the navel, proceeding from the spinal cord; hard abdomen; pressure and cramps in the stomach; relief by bending the body and drawing up the knees; *flatulence* and *obstinate Constipation;* with stools formed like sheep's dung; face and skin pale, bluish, or yellow; torpor, numbness, stiffness, coldness or weakness in the limbs; melancholy. Motor nerves chiefly disordered. It is less adapted to acute than to chronic cases.

Other remedies sometimes required are—*Cocc.* (menstrual Colic); *Merc.*, *Ipec.*, or *Podoph.* (bilious colic); *Dioscorea V.* (sudden attacks, with vomiting of food); *Puls.*, *Collin.*, *Lyc.*, *Stan.*, *Cina*, *Cimic.*, *Coni.*, *Ign.*, *Hyos.* (For Lead-Colic, see the next Section.)

Accessory Means.—Hot flannels over the abdomen; or a copious enema of warm water is often followed by immediate relief. Food of a flatulent character, especially vegetables, and every kind that has been found to disagree with the patient, should be avoided. Persons subject to Colic may be benefited by wearing a piece of flannel around the abdomen, and having the feet well protected from damp.

181.—Lead-Colic (*Colum ex plumbo*).

Symptoms.—In addition to the pain, vomiting, and constipation of ordinary Colic, there are intense grinding or twisting sensation about the navel, retraction of abdominal integuments toward the spine, pain in the back, and a blue or slate-coloured line round the edges of the gums.

It is frequently followed by *Drop-wrist*, and ultimately by *Paralysis.* (See Section 90.)

Causes.—All the preparations of lead do not equally favour the development of Colic, the oxide of lead and white-lead being specially apt to induce it. The most dangerous modes by which lead is introduced into the system are its absorption

by the respiratory apparatus, as by the continual inhalation of the dust or vapour of lead by workmen, and by taking food with hands soiled with that form of the poison which they are in the habit of using. This explains why workers in lead-mines and in white-lead factories, painters, potters, type-makers, and others, are particularly liable to *Lead-colic.* House-painters suffer most frequently. Less frequent causes are—sleeping in a recently-painted room, indulgence in snuff wrapped in tinfoil, wine sweetened by sugar-of-lead, the preparation of food in leaden vessels, or in vessels badly glazed, and water contaminated by passing through leaden pipes or kept in a leaden tank.

Lead-colic has also been observed in cows feeding on the fields in the neighbourhood of the Scottish lead-mines, and in animals drinking water from rivers which originate in lead-mines.

Treatment.—*Opi.*, *Alum.*, *Bell.*, *Plat.*, *Podoph.*, or *Ac.-Sulph.* For detailed treatment, see the Chapter on Poisons.

Prevention.—As a prophylactic measure, and a *conditio sine quâ non* of complete recovery, change of occupation is necessary. It is important to observe that some persons are much more readily affected than others, and if one member of a family suffers from Anæmia, nervousness, and debility of the upper extremities, while the others are in apparent health, the blue line on the gums should be looked for, and the condition of the water-supply, and other possible means of lead-poisoning, carefully inquired into.

182.—Constipation (*Alvus adstricta*)—Confined Bowels.

Definition.—A collection or impaction of excrement in the rectum—the residuum of the various processes concerned in the nourishment of the body*—occasioning irregularity in the evacuations from the bowel, increase in their consistence, and often a sensation of fulness and tension in the bowel and surrounding parts.

* See Section 168, on "Dyspepsia." It has been estimated that the food taken daily is about thirty-five ounces, thirty of which are assimilated, and five left as true excreta.

Constipation and Purgatives.—While we admit that Constipation is not desirable, and may almost invariably be avoided by such measures as are pointed out farther on, yet a tendency thereto is not so prejudicial as many persons suppose; indeed, people thus predisposed are generally long-lived, unless they injure themselves by purgatives, while those who are liable to frequent attacks of Diarrhœa are soon debilitated. A daily action of the bowels may be desirable in most cases, but by no means invariably so. An evacuation may take place daily, or every second day, or even every third day, in different persons who are equally healthy, no invariable rule applying to all persons. The most erroneous and dangerous idea on this subject is that extremely popular one,—that aperient drugs are beneficial, not only during sickness, but also occasionally in health, inasmuch as impurities are thereby expelled from the body. The fallacy of this may be easily demonstrated. Let purgatives be taken for a week, and however good may have been the health previously, at the termination of this period very much "impurity" will be discharged, especially after taking *jalap* and *calomel*.

Aperients during sickness are also most injurious: while "temporary relief is afforded by powerful purgatives, the delicate mucous membrane of the intestinal tract is weakened thereby, a sort of Chronic Catarrh is induced, and the very condition sought to be removed is aggravated tenfold."

Purgation produced by drugs is an unnatural condition, and although temporary relief often follows the use of aperients, they tend to disorganise the parts on which their force is chiefly expended. The intestinal canal is not a smooth, hard tube through which whatever it contains can be forced without injury; it is part of a living organism, with self-contained powers designed to propel its contents on their way, to which stimulus cannot be applied with impunity. We may reasonably conclude that what we see as the effect of an irritant upon one mucous membrane will be produced by a similar agent on other mucous membranes. For instance, snuff, pepper, or any other irritating powder, coming in contact with the mucous membrane which lines the eye, causes a profuse secretion of tears, and a congested, inflamed appearance of that organ.

That a corresponding effect is produced upon the mucous membrane of the intestines, though the immediate, ocular demonstration is wanting, is, we think, sufficiently proved by the mediate evidence afforded in the abnormally watery evacuations which follow the administration of such aperients as *Aloes* or *Colocynth.* For not only does the frequent use of purgatives over-stimulate the liver and pancreas, but more especially the numerous secretory glands which cover the extensive surface of the intestinal canal, forcing them to pour out their contents (like tears) in such excessive quantities as to exhaust their natural action and permanently weaken and impair their functions. It is obvious to a thoughtful mind that the watery or loose stools thus produced, dependent as they are upon the secretions primarily effected by the blood, must impoverish that fluid, and so produce a state of general debility. The normal action of the stomach and intestinal canal being thus deranged, nausea, vomiting, griping, and even fainting are produced. The brain and vital energies are disturbed, occasioning lowness of spirits with *Melancholy,* alternating with mental excitement and peculiar irritability of temper. And, finally, Chronic Indigestion is more frequently the effect of this deprecable use of aperients than of any other cause.

An important end will be gained when persons can be led to regard Constipation as a mere result of other causes—a want of balance in the general system; and when general and remedial measures shall be directed to the correcting of this condition as the only adequate means of curing its effect.

The "Lancet" on Purgatives.—In a leading article some years ago, the *Lancet,* after strongly denouncing the too prevalent custom of indiscriminate purgation, cites the following conditions as illustrations of what purgatives cannot accomplish. It will be noticed that these are the very conditions in which orthodox (?) medicine has with the greatest uniformity and pertinacity prescribed them. The editor affirms that (1) *Purgatives cannot eliminate morbid poisons.* They have no power, except for evil, in the eruptive fevers, including Typhus and Enteric. (2) *They cannot remove a clot on or in the brain.* Apoplexy is now known to depend on degeneration

of the blood vessels, which purgatives might damage, but could not possibly benefit. (3) *Purgatives cannot overcome a mechanical obstruction of the bowels.* After this emphatic statement, printed in italics, we are surprised the writer should have added—"In cases of such obstruction they (purgatives) should be given most cautiously, and in such forms and doses as to irritate as little as possible." If they cannot overcome the obstruction, why should they be administered at all? Why should *any* irritation be superadded to the evil which threatens to overwhelm the patient? (4) *They are unnecessary in the case of lying-in women.* The tendency of purgatives is to weaken the patient, lessen the amount of milk, and to retard the restoration of the parts by disturbance. Even when laxatives are necessary in the lying-in chamber, adds the editor of the *Lancet*, *Castor-oil* should be given in teaspoonfuls rather than in half-ounces. This is sound teaching, and we regard it as a most encouraging evidence of the permeating influence of the doctrine and practice of Homœopathy.

Constipation in Old Age.—Daily evacuation, which is the rule in youth and middle life, is often an excess in advanced life, when relief three or four times a week is sufficient. It is desirable that this physiological fact should be known, as old persons often trouble themselves needlessly on this point. If Constipation give rise to any inconvenience in the aged, it is best met by oleaginous articles of diet—butter, fat bacon, etc., which should be taken as largely as can be digested.

Symptoms.—Headache; feverishness; pressure or distention in the stomach or bowels; urging, and repeated, but fruitless, efforts to evacuate the contents of the bowel, or complete torpor without desire; pulsation or pain in the abdomen; *Piles* and *Varicose Veins;* uneasy breathing, disturbed sleep; depression of mind; etc. If Constipation be persistent, it may be attended with vomiting.

Causes.—In most instances, Constipation depends upon some faulty habit in the patient, the regulation of which will probably in every case suffice to remove this condition. The following are a few of the faults in question. Sedentary habits; smoking tobacco; drinking too much beer, port wine,

or tea; dissipation; the exclusive use of superfine flour; taking food too dry and too destitute of succulent vegetables; neglect in attending to the calls of nature to relieve the bowels; the use of purgatives (above all, of the compounds known as "dinner pills"), which have destroyed the tone of the intestinal mucous membrane. Sometimes Constipation is the result of disease in other parts—disease of the *liver*, *brain*, or *spinal cord*, or their membranes; an abnormal condition of the pancreas, causing a deficient secretion of the juice which acts on the starchy kinds of food. Torpor of the bowels may also arise from a diversion of the nervous and vascular forces to an adjacent organ, as in pregnancy; or from activity of the muscular coat of the large intestines. In recent or acute Constipation, arising from febrile action, not only the alvine, but all the secretions are arrested. Aperients, sudorifics, etc., may temporarily restore the functions, but true philosophy would indicate that the remedy must be directed to the cure of the disease, if that be possible, rather than to the simple removal of one of the symptoms to which it gives rise. The *fever* itself must be attacked, not the Constipation, any more than the want of appetite or the insufficient urination. These symptoms will be corrected as the fever subsides: the Constipation of a week or fortnight will terminate without inconvenience, and the bowels will act as naturally as if they had been moved the day before. Even in chronic disorder attended by Constipation, relief to the bowels will ensue from the action of a medicine which has no specific relation to them, but which gives tone to the whole system.

Treatment.—The following remedies, it should be distinctly borne in mind, are not intended merely to "*act upon the bowels*," but to correct the derangement upon which the Constipation depends.

Epitome of Treatment.—

Chronic Constipation.—Sulph.; Plumb. (*with Colic*); Opi. (*with drowsiness*); Nux V. (*with Headache, and ineffectual urging*); Bry. (*with throbbing Headache and torpor of the bowels*); Lyc. (*with flatulence*); Hydras. (*simple cases*); Alum. (*dry, pale motions*); Æscul., Aloes., *or* Collin. (*with Piles*);

Nat.-Mur., Podoph., Sep., Carbo Veg., Ver.-Alb., Plat., Merc., Graph., *Ac.-Nit.* is strongly recommended by Dr. Dyce Brown and others.

Leading Indications.—

Nux Vomica.—Constipation occurring in connection with other affections; habitual Constipation, with frequent ineffectual efforts to stool; Piles; nausea, congestive morning Headache, ill-humour, and uneasy sleep. It is especially useful when the affection is consequent on Indigestion, the use of alcohol, tobacco, or coffee; and for persons who take too little open-air exercise, for students and literary men.

Bryonia.—Chilliness; throbbing Headache; pain in the region of the liver; also in persons having a tendency to Rheumatism; Torpor of the bowels; large, difficult stools.

Opium.—Complete torpor of the bowels, especially after the unsuccessful use of other remedies, and when the motions are hard and lumpy, with Headache, drowsiness, dizziness, congested face, and retention of urine. *Opium* is well adapted to the aged, and to persons of a torpid or plethoric temperament.

Lycopodium.—Rumbling and flatulence; full, distended abdomen; Heartburn; water-brash; difficult evacuations.

Hydrastis.—Simple chronic Constipation. *Hydras.* gives tone locally and generally. Mother tincture, or 1st dec. dilution, one to five drops thrice daily.

Plumbum.—Obstinate cases, *as from Palsy of the intestines,* either painless, or with severe Colic; unsuccessful efforts to evacuate, with a painful, constricted feeling about the anus; the motions are dark, and passed in *small hard balls.* For persons of a paralytic diathesis it is strongly indicated. 3rd or 6th trituration, one grain four times a day.

Ignatia.—Constipation with Prolapsus of the rectum on slight efforts to evacuate; creeping, itching sensation in the rectum, as of thread-worms.

Veratrum Alb.—A paralysed state of the rectum, with dryness of the bowels. In the 3x dilution it is a reliable remedy.

Nat.-Mur.—With despairing mood, dryness and soreness of the mouth, slight Ulcerations of the tongue.

Sulphur.—Habitual Costiveness, with flatulent distention of the abdomen, Piles, skin disease, etc. Under the two latter complications this remedy, one or two drops of tincture several times a day, forms a good introduction to the treatment. As an intercurrent remedy it acts like *Opium,* but having a wider sphere, and being useful in numerous forms of disease, it is of far greater value.

Mercurius.—Sallow skin and conjunctivæ; pale whitish motions; profuse saliva.

Podophyllum, or *Merc.-Cor.* — Lumpy stools, pale, with mucus or streaks of blood, bearing-down of rectum, unsuccessful urging, fulness and hardness of abdomen, colicky pains, obstruction in the colon.

Aconitum.—Constipation with febrile symptoms.

Zinc., Alumina have also been beneficial.

Diet and Accessory Measures.—Meals should be taken with regularity, three in the day, animal food eaten sparingly, but vegetables and ripe fruits freely. Coarse oatmeal porridge (see Section 26), with treacle, may be taken for breakfast; and brown bread should be preferred to white. The beneficial results may be increased by taking brown bread for a fortnight, and then substituting unadulterated white bread for a short time. If brown bread be not eaten exclusively, a little should be taken with nearly every meal; its effects will thus be more uniformly exerted through the alimentary canal than if only taken occasionally. (See Section 3). Bread and potatoes, as indeed all starchy food, require to be thoroughly masticated and mixed with saliva, as, correctly speaking, digestion begins in the mouth. Curds and whey are, perhaps, suitable when the gastric juice is deficient, as the previous conversion of milk into curds relieves the stomach of the first process in its digestion. Water is an extremely valuable adjunct, both as a beverage and for external use. One or two tumblers of water, taken while dressing, are considered very serviceable. For tea and coffee, cocoa from the nibs may be substituted with great advantage. Spiritous liquors, highly-seasoned food, and late suppers, should be avoided.

Walking-exercise in the country, with the mind unencum-

bered, is useful, particularly in the morning; but it should not be carried to the point of inducing fatigue or much perspiration. *Frictions* over the abdomen, by towels, horse-hair gloves, or the hands, are frequently of great utility; they tend to rouse the paralysed action of the bowels, and to dispel accumulations of flatulence.

The *Abdominal Compress* (see Section 33) is extremely valuable in correcting Constipation, and, in obstinate cases, may be worn day and night. It should not be used by aged and weakly persons, in whom there does not exist vital energy sufficient to excite reaction, or when the wet linen continues to feel cold long after it has been applied. In other cases, the chill produced by the sudden application of the wet cloth rapidly disappears, and in from five to ten minutes a comfortable warmth results, proving its suitability to the patient.

Regular Hour.—Regularity in attending to the calls of nature should be observed, as there is probably no function of the animal economy more completely under the influence of habit than the one in question; nor is there any that may be more effectually deranged through the influence which the will can oppose to it. By fixing the mind on this operation for a short time, the bowels will at length respond, and a habit become established which will tend to procure both comfort and health. *Children* should be early taught the necessity of observing this rule.

Injections.—In obstinate, protracted Constipation attended with feverishness, and hardness or fulness of the bowels, and when it is ascertained that the lower bowel is obstructed with fæcal matter, too large or too hard for discharge, and the means before suggested have not proved at once effectual, the Enema may be used as an almost certain means of obtaining temporary relief. The injection should consist of a larger or smaller quantity of water, according as the accumulation is more or less distant; if it be in the ascending colon, a large amount, if in the descending, a small amount, of water should be used, at a temperature of 98°. In some cases the rectum is blocked up with fæces which require to be scooped out before the injection can be given. Gently kneading the

bowels after an injection assists in breaking up hard, obstructing masses. In this case, the injection should be as large as can be borne, and be given by another person while the patient reclines. Unirritating in its operation, and acting directly on the seat of obstruction, an injection is far preferable to strong drugs, which derange the whole alimentary tract, and excite violent action only to induce a state of greater debility and torpor than existed before. (See Section 36.) When a patient, however, *persistently refuses to resort to enemata*, and mechanical obstruction exists, or the habitual use of aperients for years has rendered relief without "opening medicine" inconceivable, or local conditions, as fissure, or chronic prolapse, demand a loose action, the practitioner may feel constrained to employ an aperient. But he regards it as a temporary expedient; he will repeat it after several days' interval only, and will administer some homœopathic remedy in that interval; he will not give a mixture of several drugs; nor will he seek by an aperient to relieve Constipation when it is a symptom of fever.

183.—Fissure and Ulcer of the Rectum.

Definition.—An ulcerated slit or wound in the lowest part of the bowel.

Pathology.—The mucous membrane of the lower part of the rectum, just within the sphincter, lies together in folds, which are smoothed out whenever the rectum is expanded; and at the lower part of it there are small dilatations or pouches. The margins of these folds are sometimes the seat of small ulcerous wounds, which are the so-called *fissures*. They are from the size of a large pin's head to that of a small currant, and are for the most part found in the posterior portion of the rectum, towards the coccyx, though occasionally in the anterior part, and even at the side. They exist more frequently in women than in men. Sometimes there is a small pedunculated polype in the region of the ulcer, which aggravates it, increases the pain, and renders cure more difficult. Examination of the part is not always

easy. If there be no spasm of the sphincter, it may be dilated by the forefingers, or the speculum, and thus the fissure may be seen and treated. But generally the pain is so great, and the introduction of finger or instrument so increases it, that spasm, further pain, contraction and closure of the orifice, ensue. Examination can, in such cases, only take place under the influence of an anæsthetic.

Causes.—Fissure may be caused (1) by retention within the pouches referred to of small portions of hardened fæces or foreign bodies, which cause irritation, inflammation, and ulcerous wounds; (2) by chaps, resulting from a heated condition of the bowel; (3) by a strain when the bowels have been constipated, tearing a small slit in the mucous membrane; (4) by a similar strain or mechanical injury during parturition; (5) by an ulcerous condition of the rectum; or (6) by a polypoid excrescence causing irritation and inflammation.

Symptoms.—The sufferer complains of excruciating pain during and for some time after defecation. And here it is noteworthy, as a means of distinguishing Fissure from Piles, that while the pain from the former is temporary (lasting from a quarter of an hour to four hours), that from the latter is continuous. But though temporary, it is intense; for the sore is generally extremely sensitive, and occasions severe distress, as it is so situated that it is rubbed and irritated by the fæces at every stool. When it is thus irritated there is a spasm of the sphincter muscle, which contracts upon the fissure and causes a sharp burning pain, and not unfrequently a forcing sensation. Indeed, the suffering is so great for some time after defecation, that the act is dreaded, and persons have been known to take questionable means to avoid it. While on the one hand the disease may be caused by constipation, on the other, it may occasion it. The fæces are consequently hardened, and are thus more irritating. In some cases, there is a discharge of blood; in all, a discharge of mucus.

Treatment.—*Medical.*—*Æsculus*, given internally and applied externally, will sometimes afford relief. It should be applied as a cerate by the finger after every defecation. It will relieve the pain and heal the sore.

Graph. and *Ac.-Nit.* are also remedial. Dr. Tod Helmuth states that he has known fissures that have resisted other medical treatment for a considerable time yield readily to the action of these agents, especially the latter.

Ign. controls return of the spasm; *Ratan.* and *Petrol.* are also important medicines.

Glycerole of *Hydras.* or *Calend.* may be applied locally. An injection of *Carbolic oil* (1 to 10), after washing out the rectum, administered daily and allowed to remain, affords great comfort, and prevents the contact of the fæces with the fissure.

Surgical.—The safest, quickest, and most satisfactory. The patient should be placed under the influence of an anæsthetic. The Ulcer should then be fully divided at its centre, throughout its entire length, in its long axis. Thoroughness is absolutely necessary. If there be a polype it should be removed at the same time. Stronger measures have been recommended; but even the modified method of dividing a few superficial fibres of the sphincter, in order to paralyse the muscle to some extent and prevent its contraction on the sore, appears to be scarcely necessary. The incision may be effectively treated by cerate of *Æscul.* applied by the finger; or by the fresh introduction every day of a linen bougie prepared with the cerate; this will keep the sphincter from contracting on the wound. After the operation, the patient should rest in bed for a few days, and avoid all irritating food.

Accessory.—Great cleanliness of the parts should be scrupulously observed. The state of the bowels should be watched, and diet attended to accordingly. Vaginal discharges should be cured by appropriate remedies.

184.—Fistula in Ano (*Fistula in Ano*).

Definition.—A narrow pipe-like track, lined by an imperfect mucous membrane, secreting pus, having a small callous opening, and situate within a short distance of the verge of the anus.

Varieties.—(1) The *complete* Fistula communicates at one extremity with the interior of the rectum, and at the other opens through the skin. This is the most common and the most annoying; fluid fæces, mucus, and flatus passing along it and causing irritation and painful spasmodic contractions of the sphincter. (2) The *blind external* Fistula only opens through the skin, and does not admit of the penetration of a probe into the interior of the bowel. (3) The *blind internal* Fistula is not so readily detected as the others, but is indicated by pain at stool, and discharge of blood and pus with the fæces; it may be discovered by a finger or probe, or seen by a speculum, about an inch to an inch and a half within the rectum.

Causes.—Fistulæ originate in Abscesses, which are prevented from healing by the movement of the *sphincter ani* and the bowel itself; or by the ulceration of the mucous membrane of the rectum, and generation of fæculent fluids and gases, which gradually excite progressive ulceration towards the surface. This condition may arise from local injury, from severe horse exercise, from the lodgment of undigested particles of food caught in the rectum (*e.g.* fish-bones), from hæmorrhoids, etc. The disease is frequent in consumptive patients, probably from deposit of tubercle under the mucous membrane of the rectum, or from the areolar tissue about the rectum losing its fat, and falling into a watery, unhealthy condition.

Symptoms.—There first appears on one side of the rectum a small hard lump, which, as it continues to enlarge, occasions considerable pain, and not unfrequently much constitutional disturbance. The surrounding parts soon become much swollen, the skin red, and the suppuration quickly follows. During the formation of the Abscess, the patient generally complains of occasional rigors, of pain in passing his motions, which are sometimes slightly tinged with blood, and of difficulty in passing urine. Great relief follows the discharge of the Abscess, which is generally most offensive, and the swelling subsides; but there still remains a small opening near the anus, and upon pressure a hardened track may be felt, leading towards the bowel. This is the Fistula. The ex-

ternal orifice of the Fistula is often very small and difficult to find in the folds of the thin skin near the anus, and is sometimes concealed by a papilla.

Treatment.—The administration of one or more remedies will aid the cure of Fistula, and in many cases, as we have found in practice, render any operation unnecessary. We have completely cured several bad cases, previously under the care of allopathic surgeons, by whom operations were said to be absolutely necessary. In one case which occurred a few years since, the patient, whose family remains under our care, has had no return of the Fistula. If any operation be necessary, Professor Stokes recommends the employment of the elastic ligature rather than the knife.

The following are the chief medicines, the choice from which must be made according to the general symptoms and condition of the patient:—*Sil.*, *Calc.-Phos.*, *Lyc.*, *Caust.*, *Nux V.*, *Calc.-C.*, and *Sulph.* At the same time, *local* applications of *Hydrastis* or *Calendula* are useful to assist the curative process.

Merc. Cor., *Thuja*, *Nit.-Ac.*, *Graph.*, *Berberis*, *Rhus*, *Lachesis*, *Ham.*, have done good service.

Dr. Burnett recommends also, *Aurum*, *Kali Carb.*, *Arctium Lappa*, *Phytolaccin* and the local application of *Liquor Calcis*, for the *Circumanal Abscess* (the origin of the disease).

Accessory Means.—An occasional poultice; frequent washings with cold or tepid water; the sitz-bath. Daily injections, as directed in the following Section, combined with the local applications previously recommended, afford comfort to the patient, prevent the extension of the disease, and favour a radical cure. Nourishing, digestible diet, abundance of fresh air, and general good hygienic conditions, are necessary to increase the reparative powers of the system.

185.—Hæmorrhoids (*Hæmorrhoides*)—Piles.

Definition.—Small Tumours, consisting of folds of mucous and sub-mucous tissue, in different stages of congestion, inflammation, or permanent enlargement, situated within or just outside the anal aperture.

Piles are of a pink or purplish hue, forming one or more distinct pendulous tumours, varying from the size of a pea to that of a damson or walnut, are often intensely painful, and constitute the most frequent disease of the anus.

Varieties.—Piles are classified as (*a*) *external* and (*b*) *internal*, according as they are situated within or without the sphincter. The *external* are covered by skin; they vary in number from one to several, clustering together like a bunch of grapes. They consist at first of enlarged blood-vessels, or varicose veins; but gradually the surrounding skin becomes infiltrated, and the coats of the Piles thickened, so that the Piles become cutaneous excrescences or hard tumours around the anal aperture. The *internal* are covered by mucous membrane, and are always within the bowel; they are very liable to bleed, especially during the passage of fæces. The blood thus lost is of a bright-red colour (being arterial), proceeds from the capillaries of the vascular surface of the Tumours, and varies in quantity from a few drops to such a profuse discharge as to be truly alarming; if Hæmorrhage be long-continued, an anæmic condition is induced which is highly prejudicial to the constitution. Internal Piles are of three kinds: *capillary*, *arterial*, and *venous*. *Capillary* Piles first appear, and easily bleed; they are attended with pain in the back and loins, and lassitude. They are generally curable; but if neglected for a year or two, they develop into the *arterial* variety, when tenesmus at stool, discharge of mucus, and excoriation of the anus are added to the other symptoms. *Venous* Piles are very large purple tumours, which protrude at every motion.

Piles that do not bleed are called *blind*; this variety is prone to Inflammation, when they become tense, appear ready to burst, and are so excessively sensitive that the patient can scarcely sit, walk, or lie.

Symptoms. — These vary considerably according to the amount of inflammation present. When the Piles are indolent, the chief inconvenience arises from their bulk and situation; or from their getting within the sphincter muscle, occasioning more or less pain when the bowel is acting, prolapse, and often a sense of weight and discomfort which quite

unfits the mind for continuous thought. But when inflamed, or, in common language, "during a fit of the Piles," there are pricking, itching, shooting, or burning pains about the anus, increased on going to stool, and a feeling as if there were a foreign substance in the rectum. After emptying the bowel, there is often painful straining, as if it were not emptied, occasioned by the Piles or the elongated mucous membrane to which they are attached being protruded during the expulsion of fæces, and not being retracted with sufficient rapidity to escape the grasp and construction of the *sphincter ani*, whose function is to close the aperture of the bowel after defecation. Ultimately, as the sphincter becomes dilated by their presence, and relaxed by frequent hæmorrhage, they constantly protrude, except when the patient is lying down. This condition is greatly aggravated if the patient stand or walk much after going to stool, or if the bowels are constipated, so that the rectum is much distended or the fæces become hard. If proper remedial measures be not adopted, the inconvenience and suffering become seriously augmented, the general health implicated, the patient loses flesh and strength, and the countenance wears a careworn expression.

Causes.—The *predisposing causes* are—a general plethoric condition of the system, or any circumstances which determine blood to, or impede its return from, the rectum: such are *sedentary habits; luxurious living*, especially the use of highly-seasoned food, wines and spirits; tight-lacing; pregnancy; confined bowels; and diseases of the liver. Residence in moist, warm, and relaxing climates; soft, warm beds or cushions, and over-excitement of the sexual organs, may also be classed among predisposing causes. The *exciting causes* include anything which irritates the lower bowel, such as straining at stool, hard riding, and the use of drastic purgatives, especially *Aloes* and *Rhubarb*.

Probably the most potent causes of this disease are the indolent and luxurious habits of the wealthy, which, by diminishing tone, occasion plethora and a tendency to abdominal Congestion. Accordingly we find Piles much more prevalent among the wealthy than among the industrial and frugal classes.

Age and sex appear to exercise considerable influence on this disease. In early life, it is probably much more frequent in young men than in young women; the comparative exemption of the latter being readily accounted for by the regular recurrence of the catamenial function, which probably obviates Congestion that might otherwise occur. At a later period, after the cessation of the menses, or during the pressure of the gravid uterus in pregnancy, Congestion is apt to occur in certain neighbouring organs, and so give rise to Piles.

Epitome of Treatment.—

1. *Ordinary cases, and from luxurious or sedentary habits.*—Nux V., Sulph., Podoph.

2. *From Constipation.*—Sulph., Æscul., Nux V., Collin., Carbo Veg.

3. *During pregnancy.*—Aloes, Collin, Nux V.

4. *Bleeding-piles.*—Ham., or Sulph. (*dark blood*); Æscul., Aloes, Acon. (*excessive bleeding*); Chin. (*after losses of blood*).

5. *Blind-piles.*—Nux V. in alternation with Sulph., Ing.; Acon. (*great pain*); Caps. (*burning and itching*).

6. *White-piles—discharges of mucus.*—Merc. (*with excoriation*); Acon. (*frequent discharge of white mucus*).

7. *Chronic.*—Ars. (*in emaciated persons*); Ferr. (*cachectic constitutions*); Ac.-Nit., Sulph., Hep.-S., Kali Carb.

8. *Suppressed.*—Acon., Puls., Sulph.

Leading Indications.—

Nux Vomica.—Piles with Constipation, or ineffectual urging; Prolapsus, or loss of power of the muscular structure of the bowel. Piles affecting patients of sedentary habits, or from luxurious living, indulgence in stimulants, or depressing mental emotions. *Sulphur* may advantageously follow this remedy, a dose being given morning and night for four or five days; or *Sulphur* and *Nux Vomica* may be given in alternation, the former in the morning and the latter at night. During an attack of Piles, the remedies may be taken every three or four hours.

Hamamelis.—Bleeding-piles, or a varicose condition of the hæmorrhoidal veins, particularly with a varicose state of the veins of the lower extremities. For cases in which there is

considerable loss of blood, it should be used both internally and externally, a *lotion* being made by adding thirty drops of the strong tincture to four ounces of water, and applied by means of two or three folds of linen, covered with oiled silk, and renewed several times daily. Generally, a very powerful remedy.

Æsculus.—*Bleeding*-piles, with much *pain in the rectum*, and also in the *back and loins*. A cerate of *Æsculus* for local use is often of great advantage in external Piles. To one part of *Æsculus* add nine parts of olive oil, and sufficient beeswax to give the cerate consistency.

Collinsonia.—Piles associated with Constipation, or uterine disorders.

Aconitum.—An inflamed condition, with feverish restlessness, a sensation of heat, and discharge of mucus or blood. For the *excessive pain* often associated with Piles, besides its internal use, *Acon.* may be used as a *lotion*.

Arsenicum.—Burning sensation, and sometimes a feeling comparable to passing red-hot needles through the Piles, with intolerable pain in the back, protrusion of the Tumours, and *prostration of strength*.

Aloes.—With torpor of the liver; profuse discharge of hot, dark-coloured blood. It may be alternated with *Sulph.*, or may precede or follow that remedy.

Podoph. has a similar action.

Sulphur.—This remedy is regarded as one of the most valuable in every variety of Piles, especially in *chronic* cases, occurring in scrofulous individuals, and associated with *Constipation*, or thin evacuations mixed with blood.

Other useful remedies are Amm. C., Nat. Sulph., Ac.-Fluor., Hydras.

Diet and Accessory Means.—As this affection is very generally only an expression of functional disturbance, and is to be removed only by the restoration of functional balance, the general state of the health demands special care. Patients should avoid coffee, peppers, spices, stimulating, highly-seasoned, or indigestible food of every kind, and the habitual use of beer, wine, and spirits. Light animal food, a liberal quantity of well-cooked vegetables, and ripe and wholesome

fruits, form the most suitable diet. During an attack of Piles, animal food should be sparingly used. Over-eating or drinking causes engorgement of the portal vein, and Piles are the common result.

Sedentary habits and much standing, or extreme fatigue, are prejudicial; as also is the use of cushions and feather-beds. The pain attending *Blind-piles* may be relieved by ablution in cold or tepid water, whichever is found more agreeable. *Bleeding-piles* may be relieved by drinking half a tumbler of cold water, and then lying down for an hour. The horizontal posture should be maintained as much as possible, as that is the most favourable to recovery. When Piles protrude, the use of *petroleum-soap* is recommended.

Injections.—Great relief and permanent benefit will also follow an occasional injection of about a pint of cold or tepid water up the lower bowel. This acts beneficially, by constricting the blood-vessels, softening the fæces before evacuation, and by giving tone to the relaxed structures. Injections of water are also of service after each evacuation, when any fæculent matter remains. As a rule, tepid injections are most suitable for patients of a full habit of body, and cold ones for those of relaxed constitutions.

When Piles are excessively sensitive or painful, the patient should sit over the steam of hot water, keep his bed, or recline during a great part of the day on a couch. Strict cleanliness is also essential. The parts should be frequently washed with soap and cold water; or, when the Tumours are inflamed and painful, with tepid water. A piece of sponge and tepid water should in such cases be substituted for paper. A warm or vapour-bath (see Sec. 32) may be occasionally used at night, when the liver is inactive and the skin dry and harsh. It should be followed in the morning by a cold bath, or the body should be rapidly rubbed, first with a wet cold towel, and then with a dry one.

The Abdominal Compress (see Sec. 33) is strongly recommended as *preventive* of Piles, and should be adopted directly the first symptoms are felt; also as a *curative* measure in connection with others pointed out.

Another most important point for patients troubled with

Piles is, that the habit should be acquired of going to stool at night, immediately before retiring to bed, instead of morning, so that the horizontal posture may favour the early subsidence of the tumour, instead of its remaining in an inflamed and prolapsed condition, to the great annoyance and distress of the patient, and to the permanent injury of the parts.

Caution should also be exercised in the selection of paper used. Harsh paper irritates. White printing paper is injurious, on account of the chemicals employed in bleaching it; and printed paper, on account of the composition of the ink.

Surgical measures are sometimes necessary, when ligatures are best employed; but, happily, they are rarely required under homœopathic treatment, the most inveterate cases generally yielding to our prescriptions without the use of the *knife*, the *ligature*, or *nitric acid*.

186.—Pruritus Ani (*Pruritus ani*)—Itching of the Anus.

Definition.—A peculiar and very troublesome itching of the anus, at first of a voluptuous character, but afterwards violent and almost unbearable.

Symptoms.—Crawling, tingling, irritating sensations about the anus, often most troublesome at night, as the patient gets warm in bed, and preventing sleep. It is frequently complicated with an excoriated or fissured condition of the anus; for the friction resorted to causes the surrounding tissues to become thickened and furrowed.

Causes.—Irritation of Piles; Worms; lodgment of fæces; suppressed period, or any suddenly-suppressed discharge, or cutaneous eruption. Frequently, itching of the anus is only a symptom of disease of the liver, of some portion of the digestive apparatus, especially the rectum, or of some part in immediate proximity thereto. It is increased by heat, rich living, etc.

Treatment.—*Sulph.*, *Ac.-Nit.*, *Lyc.*, *Ant.-C.*, *Ars.*, *Thuja*, *Ign.*, *Cina*, *Ambra*. The selection of the remedy must be guided by the cause of the affection and by the symptoms

present. The local use of dilute *Carbolic Acid* (five drops to the ounce of water) generally gives great and speedy relief. See Sections on "Prurigo," "Hæmorrhoids," "Worms," and "Dyspepsia."

187.—Prolapsus Ani (*Prolapsio ani*).

Definition.—A protrusion of the mucous lining of the rectum through the anal orifice, after the action of the bowel, which goes back of itself or is easily replaced. In severe cases the protrusion takes place from walking, riding, or even too long standing, and can only be replaced with difficulty. In complicated cases, a portion of the muscular structures of the rectum is protruded with the mucous membrane.

Causes.—Long-continued Constipation or Diarrhœa, purgatives, straining excited by the presence of Worms, Stone in the bladder, etc. General laxity of structure may predispose to the complaint, or, at any rate, aggravate the causes already indicated.

Treatment.—*Ignatia.*—Is often specific, and is generally the first to be used, especially for infants and children. The indications are—*frequent ineffectual urging to stool,* straining, difficult passages of fæces, itching, and Prolapse of the bowel. A dose thrice daily, for two or three days; afterwards, morning and night.

Nux Vomica.—Prolapsus, with *costiveness* and straining at stool, for patients of vigorous constitution.

Mercurius.—Prolapsus, with *itching,* discharge of a yellowish mucus (*White-piles*), and *Diarrhœa;* hard, swollen abdomen.

Podophyllum.—Prolapsus accompanying Diarrhœa, with *straining and offensive stools;* irritation from teething, etc.

Lycopodium.—*Obstinate cases,* and when other remedies only partially cure.

Sulphur.—For similar conditions.

Gamboge, Calc.-C., Sep., Ars., Aloes, Ac.-Mur., Ferr. Phos., Ant. Crud., and *Bry.,* are additional remedies.

Accessory Measures.—Two points should be steadily kept in view:—*The return of the Prolapse, and the removal of the*

cause. The protruded part should be replaced with the fore-finger, previously lubricated, carrying it beyond the contracting ring or sphincter muscle of the anus. As long as the complaint continues, the patient should lie down for a short time after the action of the bowels, so as to favour the complete return of the protruded part. Bathing the parts, and the body generally, every morning in cold water, and occasional injections of tepid or cold water, help to impart tone to the relaxed structures. The *diet* should be plain and nourishing, and include such varieties of food as favour the healthy action of the bowels. If, as is most frequently the case, Indigestion, Constipation, or Worms cause the complaint, the treatment recommended in the Sections devoted to those disorders should be carried out.

188.—Hepatitis (*Hepatitis*)—Inflammation of the Liver.

Definition.—Inflammation of the capsule of the liver, Glisson's capsule, or of the substance of the gland, or of all combined.

Acute inflammation of the liver is not frequent in this country, although it is very common in tropical climates. From various causes, English residents in India are very generally attacked by disease of this important organ. The principal cause is the maintenance of habits of living and diet which may be appropriate to residence in a temperate climate, but which are positively injurious in tropical countries. Europeans who have suffered from this disease are always subsequently liable to disorder of the liver.

Symptoms.—The disease is usually ushered in by rigors, which are quickly followed by hot skin, thirst, and scanty urine; sometimes nausea and vomiting; white- or yellow-furred tongue; bitter taste; pain and tenderness more or less severe in the region of the liver, aggravated by pressure, deep breathing or coughing, and extending to the top of the right shoulder; fulness from enlargement of the organ; a yellow

tinge of the conjunctivæ, and often a general jaundiced state of the skin; the breathing is short and thoracic, being performed almost entirely by the intercostal muscles; sympathetic Cough and vomiting. The fever sometimes assumes a typhoid character.

The symptoms vary, however, according to the portion of the gland implicated in the inflammatory process. When the disease is in the convex side of the liver, it is accompanied by a burning, stitching pain in the right side, which extends into the chest, under the collar-bone, between the shoulder-blades, to the top of the right shoulder, and sometimes down the arm, and is aggravated by external pressure. If the Inflammation be in the inner portion of the liver, there will be the symptoms already indicated,—saffron-coloured urine, yellow colour of the eyes and skin, etc. If the substance of the gland be involved, the pain is of a dull, tensive character; if the thin serous covering which invests the organ, the pain is sharp and lancinating. Whatever part of the liver is diseased, increased secretion of bile, some degree of Jaundice, dyspnœa, Cough, etc., are present.

Terminations.—1. *Resolution.*—This is indicated by an amelioration of the febrile symptoms, copious perspiration, and an abundant deposit in the urine. 2. *Abscess.*—Matter forms, sometimes enclosed in a cyst, at other times diffused, the patient experiencing throbbing, pulsating sensations in the part, with the general symptoms of Hectic fever, the Abscess discharging itself into the stomach, duodenum, or colon, or externally by perforation of the chest or abdominal wall. 3. *Enlargement.* (See next Section.)

Causes.—In Great Britain, the disease arises from Cold, nervous depression, pregnancy, drunkenness, and other causes; and is then usually seated in the peritoneal covering, resembles Pleuritis, and ends in adhesion to the diaphragm or other adjacent parts. In India it is caused by cold, exposure to a draught, and wet, acting upon a constitution brought into a susceptible condition by the continuance of European habits of life, especially in the common use of malt and spirituous liquors. The substance of the liver is usually the part affected.

EPITOME OF TREATMENT.—

Acon. (*fever*); Bry. in alternation with Merc. (*after the fever is abated*); Hep.-S. (*if Abscess form*); Coni., Phos., Nux V., Cham., Kali Iod., Amm. Mur.

ACCESSORY MEANS.—When there is severe pain, the whole of the affected part should be covered with two or three thicknesses of linen, squeezed out after immersion in a lotion of half-a-drachm of the strong tincture of the root of *Aconitum* to half-a-pint of *hot* water, and covered with oiled silk and flannel, or spongio-piline.

See also "Accessory and Preventive Means" in next Section.

189.—Simple Enlargement of the Liver (*Amplificatio simplex jecinoris*)—Congestion of the Liver—Liver-Complaint.

DEFINITION.—Enlargement of the substance of the liver, from distention of the blood-vessels and bile ducts.

SYMPTOMS.—Fulness on the right side in the region of the false ribs; sense of weight on assuming the upright posture; uneasy sensation when the part is pressed upon; the complexion may be pale, sallow, or dusky; the tongue coated; the bowels constipated; the appetite faulty; and there may be nausea, Vomiting, headache, languor, lassitude, and depression of spirits. The pulse is usually slow and irregular. Functional derangement, with suppressed secretion, sometimes accompanies Congestion of the gland.

CAUSES.—Sudden chills; *too abundant, highly-seasoned, stimulating diet; the habitual use of alcoholic drinks;* anger, or other mental influences; excessive bodily exercise in the heat of the sun. Hepatitis is also an occasional cause. It is a very common disease, and Dr. Budd thus accounts for its frequency: "Amid the continual excesses at table of persons in the middle and upper classes of society, an immense variety of noxious matters find way into the portal blood that should never be present in it, and the mischief which this is calculated to produce is enhanced by indolent or sedentary habits. The consequence often is, that the liver becomes habitually

gorged. The same, or even worse effects, follow in the lower classes of our larger towns, from their inordinate consumption of gin and porter."

In some parts of India, Dr. Parkes thinks, entozoic influence may be at work in the production of hydatid disease of the liver, or other diseases of the same class, more generally than is supposed.

Cirrhosis, or *Hob-nailed liver*, is a chronic inflammation and hypertrophy of the areolar tissue, covering and pervading the gland, causing it to become firm and indurated, and afterwards contracted. The contraction leads to the drawing in of the capsule, which gives the liver the gnarled, "hob-nailed" appearance. It is a frequent effect of spirit-drinking, and is known as *Gin-drinker's liver*. So contracted is the gland, that it is unable to fulfil its secretive function, and hence Dropsy and death ensue.

Epitome of Treatment.—

1. *Enlargement of the liver.*—Phos., Merc., Ac.-Nit., Agar., Hydras., Ars., China (*after fever and ague*).

2. *Heptalgia* (*pain in the liver*).—Acon. (*hard-aching, or shooting pains after exposure*); Bry. (*tensive and burning, or stinging pains; and in rheumatic persons*); Merc. (*dull pain*); Sabad. (*dull scraping sensation*); also Amm. Mur., Berb., Diosc., Ranun.

3. *Biliousness.*—Bry. (*vomiting of bile and mucus*); Nux V. (*from stimulants and over-feeding; also when associated with Piles*); Sulph. (*Constipation*); Merc. (*white, costive stools, and depression*); Acon. (*bilious attack from cold*); Cham. (*from anger*); Iris (*sick-headache*); Lyc., Hep.-S., Puls., Podoph., Chel., Tarax., Lept., Eupat. Perf., Kali Carb.

4. *Bilious Diarrhœa.*—Podoph. (*with bitter taste and dark urine*); Iris (*in hot weather, with vomiting*); China (*simple cases; and in summer*); Cham. (*in children and females, also when caused by passion*).

5. *Dropsy of the abdomen from Cirrhosis.*—Ars., Crot.-Tig., Ac.-Nit., Nux V., Phos., China, Aur. Mur.

Leading Indications.—

Bryonia.—Enlargement and hardness of the liver, with shooting, stinging, or burning *pains, increased on pressure*, and

Constipation, without inclination for stool. *Bry.* often acts better in such cases when alternated with *Merc.*

Mercurius.—Dull, pressive pain, which prevents the patient from lying long on the right side; *yellow tinge* of the conjunctivæ; sallow skin; shivering, followed by profuse clammy perspiration; loss of appetite; foul taste in the mouth; Constipation, with white stools; or relaxation, with bilious motions. *Merc.* is one of the best hepatic medicines in simple cases. (See also *Bry.*) But for patients who have been dosed largely with *Mercury*, *Hep.-S.* should be selected, especially when the stools are *clay-coloured.*

Nux Vomica.—Liver-derangement from the use of intoxicating drinks, excessive or stimulating foods, sedentary habits, or nervous exhaustion, with Constipation, deep-red urine, etc. Also, when associated with Piles: in this case, *Sulph.* should be alternated with *Nux V.*

Lycopodium.—Sometimes required instead of, or after, *Nux V.*, when the latter is insufficient; *Constipation with flatulence;* continual pain in the right side and back.

Chamomilla.—Bilious attacks in females and children, from exposure to *cold*, or *from anger;* nausea or vomiting of bile, yellow-coated tongue, and sometimes bilious Diarrhœa.

Aconitum.—Sudden, *acute* bilious attacks, following chills, with febrile disturbance; threatening Jaundice; generally to be alternated with *Merc.*, unless allopathic doses of Mercury have been given, when *China* should be substituted.

Podophyllum.—Bilious vomiting, and Diarrhœa, with Prolapsus Ani; bitter taste; dark urine; sallow complexion.

Arsenicum.—*Severe and chronic cases*, with extreme weakness, burning pain, vomiting, and exhausting Diarrhœa. Enlarged spleen. Ascites.

Chelidonium Majus.—Chronic Liver disorder; thickly yellow-coated tongue; nausea; dull headache; deep yellow and thick urine; pain and fulness; constipated bowels.

Ac.-Nitric. or *Phosphorus.*—Long-continued, obstinate cases, with Jaundice, more especially if there be reason to fear organic disease of the liver; the former if there be Dropsy; the latter if there be *fatty degeneration*, Cirrhosis, etc. *Ac.-Nit.* is also specially indicated if the patient has been treated

with Calomel and Quinine. *Croton-Tig.*, for Ascites from Cirrhosis.

Accessory and Preventive Means.—*Rest* and *change* are most valuable, both as means of cure and prevention. The burden of business and domestic cares should be removed for a time, and the monotonous scenes of everyday life exchanged for the hill-top and wild moorland; or at least the long hours of mental and physical exhaustion should be abridged, and more time allowed for the daily renewal of nervous energy. The patient should strictly avoid everything mentioned in a foregoing paragraph as "Causes," for wrong habits will render a cure impossible; on the other hand, self-denial, abstinence, and correct habits, in conjunction with the medicinal treatment pointed out, will generally ensure the most gratifying results. Great regularity should be observed in the hours of meals; only light and nutritious food taken, and all stimulants strictly avoided.

To residents in India and other tropical climates, the foregoing remarks on diet and stimulants are especially appropriate. The food should be properly cooked, and the quantity taken should be proportioned to the amount of physical work and exercise. With regard to the food supplied to soldiers not in action in India, two errors are committed: it is too much in quantity; and, in addition, there is a very large amount of condiment—spices and peppers—with it; articles which may be fitted for the rice and vegetable diet of the Hindu, but are particularly objectionable for Europeans. (See Section 15, on "Sanitary Hints for Europeans in Tropical Climates.")

The *abdominal compress* (see Sec. 33) is a most valuable adjunct in all liver-affections; a cold salt-bath should also be used daily. Riding on horseback in the cool of the day is beneficial, as it affords exercise without much fatigue. Carlsbad waters are beneficial.

190.—Jaundice (*Morbus regius*)—Icterus.

Definition.—A morbid condition of the system characterised by yellow discoloration of the conjunctivæ, skin, and other tissues, and dependent on derangement of the biliary secretion.

From the different degrees of colour of the skin, Jaundice has been termed *yellow*, *green*, and *black*.

Pathology.—The function of the liver is to secrete bile from the blood; Jaundice may therefore be occasioned (1) by suppression of the biliary functions, in consequence of which the bile is not eliminated from the blood, but remains with the cholestrine in such excess as to affect the tissues; (2) by re-absorption of the bile which has been properly eliminated, but is retained in the liver and not transmitted to the duodenum. Jaundice by suppression may arise from innervation of the gland, active and passive congestion, disordered hepatic circulation, or destruction of the secreting cells of the liver. Jaundice by re-absorption may arise from disease or some congenital impediment in the biliary ducts which obstructs the outward flow of bile. The re-absorption of bile by the blood in the liver is followed by its diffusion throughout the system by that medium. After Jaundice from obstruction has existed some time, suppression also supervenes.

Symptoms.—Yellow tinge, first of the whites of the eyes, then of the roots of the nails, and next the face and neck, and finally the trunk and extremities. The urine becomes yellow-coloured or deep-brown, and stains the linen; the fæces whitish or drab-coloured; there is Constipation; lassitude; anxiety; pain in the stomach; bitter taste; itching of the skin, yellow sight, and, generally, febrile symptoms. Sometimes, especially in children, the bowels are relaxed from the food being insufficiently digested and occasioning irritation. There are also, usually, depression of spirits, prostration of strength, and slowness of the pulse. The presence of the yellow tint in the conjunctivæ and urine is very conclusive that the patient is suffering from Jaundice, and not merely from the sallowness of Anæmia. The addition of nitric acid to the urine changes it to a deep green colour. If the disorder continue there may be stupor, or delirium, and other

brain symptoms. When there is obstruction from a *gall-stone*, the most acute suffering is induced; the pains come on in paroxysms, and are often accompanied by vomiting and hiccough.

Causes.—Derangement in the functions of the liver connected with the secretion of bile, is frequently consequent on atmospheric changes, dietetic errors, dissipation, fits of passion, etc. The excessive use of chamomile tea, *Quinine*, *Rhubarb*, or *Calomel* in some fevers, may also be stated as a cause, as these drugs induce obstruction of the bile-duct. Pressure of the enlarged womb in pregnancy, or the growth of tumours, causing obstruction of the gall-ducts, are also occasional causes of Jaundice. Occasionally infants are born with Jaundice, the liver not having yet assumed its function of purifying the blood. But *sedentary occupations*, *mental anxiety*, and *high living*, are probably the most frequent causes. Cancerous disease of the liver, or of the gall-bladder, are sometimes associated.

Gall-Stone.—A not uncommon impediment to the flow of bile is the impaction of a *gall-stone* in the natural channels of the bile. A gall-stone consists of bile in a crystalline form, the solvent properties having been released. The pain attending its passage is very severe, commences suddenly, is constant for a time, terminates suddenly, is of a more local character, being in the site of the gall-duct, and is thus distinguished from *Colic*.

Epitome of Treatment.—

1. *Acute Jaundice.*—Acon., Merc., Nux V., Hydras. (Dr. Hale recommends five drops of the ϕ tincture); Cham.

2. *Chronic.*—Chel., Podoph., China, Dig., Ars., Phos., Iod., Ac.-Nit., Leptand., Carbo Veg., Podoph. (See also the previous Section.)

3. *Gall-stones.*—*Acon.*, and the application of a large hot compress over the seat of pain during the passage of a calculus through the gall-duct.

China is said to dissolve gall-stones, and to prevent their re-formation.

Carlsbad waters are also stated to be almost specific in the cure of gall-stones.

Leading Indications.—

Aconitum.—Jaundice, with symptoms of Inflammation, and great pain in the region of the liver.

Mercurius.—This is one of the most valuable remedies, and will often effect a speedy cure; it is especially useful after the use of *Acon.*

China.—Intermittent Jaundice, or Jaundice from marsh-miasmatic influences; with bilious Diarrhœa.

Nux Vomica.—Jaundice with *costiveness*, sensitiveness in the region of the liver, from sedentary habits, or indulgence in stimulants.

Chamomilla.—From fits of *passion* in children.

Chelidonium Maj.—Jaundice, with pain or tenderness in the *liver and right shoulder*, deep-red, clean tongue, bitter taste; light-coloured, formed stools, etc.

Phosphorus.—Brownish-yellow skin and conjunctivæ; frequent, copious, whitish-grey evacuations; blackish-brown urine; *dejection and despondency;* sometimes loss of voice, *Cough*, and other symptoms of malignant Jaundice.

Arsenicum.—Malignant cases, with typhoid symptoms, or great emaciation. *Ars.* is also useful for the Dyspepsia following an acute attack; for Jaundice from the free use of *Mercury*; and for obstinate cases from fever and Ague; also *Crot. H.*

Jaundice during pregnancy, or from Cancer or other tumour of the liver, requires special treatment.

Diet.—Light and digestible—chicken-broth; beef-tea; *toasted* bread, scalded with hot water, with a little sugar; roasted apples; and as much cold water as the patient desires.

Accessory Means.—Flannel squeezed after immersion in *hot* water, or a hot hip-bath, relieves pain. Jaundice from inactivity and Chronic Congestion of the liver requires change of air and scene, travelling, *daily walking—or horse-exercise*, regular and temperate habits, and the use of the abdominal compress, as described in Sec. 33. Jaundice consequent on re-absorption of bile may be relieved by the Carlsbad waters; but that arising from congestion, or destruction of the hepatic cells, becomes worse.

191.—Peritonitis (*Peritonitis*)—Inflammation of the Peritonæum.

Definition.—Inflammation of the serous membrane which lines the abdomen, and invests and supports the viscera contained therein.

If the treatment be not prompt and efficient, the disease may become chronic, or suppurative; or *adhesions* may supervene.

When the disease attacks parturient women it is termed "Puerperal Peritonitis," and is often dangerously contagious among this class of patients.

Symptoms.—Shivering and febrile disorder frequently, but not invariably, usher in the disease. There is a stitching, burning, and more or less constant pain, generally first felt below the navel, and soon extending over the entire abdomen; great sensitiveness, so that pressure of the bedclothes becomes unendurable; the pulse is quick and small; and nausea, vomiting, and generally Constipation and Tympanites are present. The patient lies on his back with his legs flexed, so as to relax the muscles of the abdomen. When Peritonitis arises from perforation of the stomach or intestine, the pain is *sudden* and *intense*, the abdomen becomes excessively sensitive, and the patient is liable to succumb suddenly.

Causes.—Mechanical violence, as a kick, operations, etc.; fœtid lochia; decomposing fragments of retained placenta; this, or other animal poisons, conveyed from one patient to another by doctors and nurses; sudden and excessive changes of temperature; errors of diet; frequent intoxication, the disease termed *Gin-colic* being really Chronic Peritonitis. Inflammation of the peritonæum is often secondary to Enteritis, Hepatitis, Perforation of the intestine, or stomach, and Obstruction of the bowel.

M. D'Espine, after a thorough investigation of post-partem inflammations, came to the conclusion that blood-poisoning from *fœtid lochia* is the origin of *Puerperal Peritonitis*, the so-called *Milk-fever*, and other inflammations and congestions liable to occur after accouchement. Febrile action in the first week after delivery almost always depends on absorption of

lochia through slight abrasions or lacerations of the utero-vaginal canal. It may continue for some weeks, should the uterus not be firmly contracted, or should the lochia be fœtid. In the latter case, ulcerations, through which absorption takes place, may almost always be found either on the cervix or in the vagina.

Treatment.—In uncomplicated Peritonitis, the following treatment, if commenced early, will be rapidly curative.

Aconitum.—Peritonitis from cold, with predominance of febrile symptoms. A dose every hour till relief is experienced. It is also required early in the disease, in alternation with any other remedy selected. A low dilution should be used.

Bryonia.—Stinging and burning pains, greatly increased on movement; Constipation, general uneasiness, etc.

Mercurius Cor.—Sallow skin, yellow-coated tongue, and when Tympanites and Abscesses occur. It is especially useful in scrofulous patients.

Belladonna.—Brain disturbance—Headache, flushed face, throbbing, etc. A few doses usually suffice.

Canth., Coloc., Ars., Merc. Dul., Lyc., Calc. C., China are additional remedies.

Accessory Means.—Hot fomentations to the abdomen to relieve pain; perfect quiet; frequent sips of cold water. Pieces of ice, sucked in the mouth, or *swallowed*, will assuage the vomiting. When the acuteness of the attack is passed, mild, unstimulating diet, and the use of the abdominal compress (see Sec. 33). In some cases, cold compresses do more good than hot fomentations.

CHAPTER X.

Diseases of the Urinary System.

192.—Albuminuria (*Albuminuria*).

Definition.—A morbid condition of the urine, symptomatic of renal disease, but not always consequent on it, and characterised by the presence of albumen.

Albuminuria is not Bright's disease. It is always associated with it, but may exist prior to and independently of any renal disease. If neither blood nor pus be present in the urine, but if nevertheless it be coagulable in even a considerable degree, thereby indicating the presence of albumen, it does not follow that there is any structural change in the substance of the gland. Albuminuria is frequently of neurotic origin, is a symptom of Exophthalmic Bronchocele (see Sec. 142), and is sometimes consequent on cold bathing.

Diagnosis.—Dr. Roberts has shown how to determine whether Albuminuria be consequent on renal disease, by ascertaining—"(1) The temporary or persistent duration of the Albuminuria; (2) The quantity of the albumen present, and the occurrence and character of a deposit of renal derivatives; (3) The presence or absence of any disease outside the kidneys which will account for the Albuminuria." Though albumen is not a constituent of healthy urine, it may exist in the urine of healthy persons, or of persons whose health is only slightly and temporarily disordered.

Prognosis.—Albuminuria of recent date is as curable as acute Bronchitis or acute Pneumonia; for it has been proved to be transient by the return of the urine to its ordinary character after many months of persistent degeneration. As a general rule, Albuminuria is always attendant on Bright's disease; but there is an exception in the case where there is a small, contracted, granular kidney, in which the urine is often free from albumen, and in which the prognosis must be unfavourable. In short, acute Albuminuria may be regarded hopefully; but as a symptom of disordered functions it should be considered in conjunction with other chemical and microscopic conditions.

Symptoms.—The quantity, density, and colour of the urine remaining at a healthy standard, the tests by heat and nitric acid show *intermittent coagulability*.

Causes.—Febrile and inflammatory diseases; visceral diseases; neurotic irritation; Dyspepsia; excessive albuminous diet, such as eggs; bathing in cold water. Dr. G. Johnson has shown that prolonged cold bathing may produce transient Albuminuria; and if such bathing be frequently

repeated, the consequent repression of cutaneous secretion may lead to increased blood-pressure in the internal organs, and produce permanent mischief and structural degeneration of the kidney. It is probable that active swimmers are less likely to suffer than occasional bathers.

EPITOME OF TREATMENT.—Acon. (*incipient*); Ac.-Phos., Helon. (*from nervous irritation*); Lyc., Tereb. (*with urinary symptoms*); Ars., Apoc. (*Œdema and Dropsy*).

193.—Nephritis (*Nephritis*)—Bright's Disease (*Morbus Brightii*).

DEFINITION.—Nephritis is inflammation of the kidneys producing a morbid condition of the gland and its secretions.

BRIGHT'S DISEASE is a morbid condition of the kidneys: the term is "generic," and includes "several forms of acute and chronic disease of the kidney, usually associated with albumen in the urine, and frequently with Dropsy, and with various secondary diseases resulting from deterioration of the blood."

1. ACUTE NEPHRITIS—ACUTE BRIGHT'S DISEASE (*Morbus Brightii acutus*)—TUBAL NEPHRITIS—ACUTE RENAL DROPSY—POST-SCARLATINAL DROPSY.

SYMPTOMS.—Anasarca of the upper as well as the lower parts of the body—the hands and feet as well as the face being puffy and swollen; febrile symptoms—a dry, harsh skin; quick, hard pulse; thirst; and often sickness, from sympathy of the stomach with the kidneys. The skin is tense, with the infiltration of serous fluid through the subcutaneous areolar tissue, but it does not pit. There is frequent desire to pass water, which is scanty, highly coloured or smoky-looking, albuminous, and of high specific gravity. If the urine be examined by the microscope, blood corpuscles may be seen in it, and granular casts of the minute tubes of the kidneys, consisting of numerous spheroidal tubes of epithelium, the kidneys being in an active state of congestion, if not of inflammation. If the urine be tested by heat and nitric acid, it will deposit *albumen*. This condition has been called *Desquamative Nephritis*, owing to the rapid separation

of epithelium which goes on. The morbid anatomy of the kidney shows it to be small, hard, and granular.

As may be inferred from what has been stated, both a chemical and microscopical examination of the urine is necessary, and should be made frequently, to determine the progress or decline of the disease. Indeed, without the aid of the microscope, it is often quite impossible to detect the variety and stage of the disease.

The renal symptoms are sometimes complicated with Pleurisy, Pericarditis, or Peritonitis.

Causes.—The effects of fever, especially *Scarlet Fever* (see Section 43), exposure to wet and cold, the action of irritating drugs, alcohol, etc. Dr. G. Johnson found, by an analysis of 200 cases, that intoxicating drinks cause 29 per cent. of all cases, 26 per cent. are due to exposure, and 12 per cent. arise from Scarlet Fever. The digestive and secretory functions being impaired, the blood and nervous system become deteriorated, the balance in the circulation is lost, and the secretion of the kidneys is changed.

2. Chronic Nephritis—Chronic Bright's Disease (*Morbus Brightii longus*)—Gouty Kidney—Granular Kidney.

Symptoms.—Debility, general impairment of the health, and pallor of the surface, coming on insidiously, with pain in the loins, and frequent desire to pass water, particularly at night, the urinary secretions being at first increased in quantity. The patient's face becomes pallid, pasty, and œdematous, so that his features are flattened, and there is loss of appetite, acid eructations, nausea, and frequent sickness, which nothing in his diet can account for. His urine is found to be of less specific gravity than natural, as shown by the depth to which the urinometer sinks below its surface; it is also albuminous and coagulable by heat and nitric acid. There is most albumen at the beginning of the disease, because the kidneys are more congested; but it is of lowest specific gravity at the end, when the urinometer may go down to 1·004, and then the quantity of urine is very small. At first the urine may be of a very dark or smoky colour, from containing blood-corpuscles; but afterwards it becomes paler. The morbid anatomy of the kidney shows it to be large and white.

The disease progresses slowly; but sooner or later there is *Anæmia*, in consequence of the tenuity of the blood from loss of its albumen, so that it is incapable of producing or maintaining the floating cells characteristic of healthy blood. Œdema of the feet and ankles is present, and, in advanced stages, there may be Ascites, or general Dropsy. But Dropsy is not invariably a very marked symptom of the disease; it is sometimes scarcely observed, death arising from *Uræmia*—accumulation of urea in the blood from inability of the kidneys to excrete it. The urea acts as a poison on the brain, producing Delirium, Convulsions, and Coma; and of Coma the patient dies. Sometimes, from the poisoned state of the blood, inflammation of a serous membrane arises, especially Pericarditis or Endocarditis, setting up valvular disease of the heart, and then the patient becomes extremely dropsical, and is carried off by Asphyxia, from a complication of heart and kidney disease. At this advanced stage the kidneys are found to be nearly white, or of the colour of a parsnip, anæmic, sometimes enlarged and sometimes diminished in size.

Causes.—Chronic Nephritis often follows Acute Nephritis; sometimes it is a result of bad living, *intemperance*, constant exposure to wet; Struma, Gout. Workers in lead—painters and plumbers—are particularly liable to the disease. It is a constitutional disease; both kidneys are equally affected, probably from some defect in assimilation or other minute changes in nutrition.

Treatment.—The morbid condition in the acute and chronic forms of this disorder is the same. In detail, therefore, the treatment must be strictly adapted to the peculiarities of individual cases. The results of the remedies and means employed must be tested at regular intervals by an examination of the urine. Patience is necessary; after carefully deciding as to the line of treatment, it must be steadily persevered in, as marked improvement can only be seen after considerable time.

Epitome of Treatment.—Acon. (*Incipient stage; feverish symptoms*); Tereb., Canth., Chelid. (*acute stage*); Ars., Sulph. (*chronic*); Nux V., Kreas., Ac.-Nit. (*Dyspepsia*); Opi., Ferr. (*uræmic symptoms*); Nux V., Ars. (*from alcoholic drinks*);

Ac.-Phos. (*from suppuration or other cachexia*); Plumb., Colch. (*granular degeneration*); Ac.-Phos. (*amyloid degeneration*); Phos. (*fatty degeneration*) Apis, Apoc., Asclep.-Tub., Merc.-Cor. (*in pregnancy and Scarlet Fever*); Ferr., Sulph. (*convalescence*).

Leading Indications.—

Terebinthina.—Scanty, dark, smoky, bloody urine; acute hyperæmic state of the kidneys; much hæmorrhage; renal tubes but not epithelial cells in the blood; albumen present *when blood is present;* Nephritis *from cold;* general œdema; Anasarca.

Cantharis.—Drop-by-drop and painful micturition; urine containing blood, albumen, fibrinous cells, and *Epithelial* cells from the renal tubes; when *desquamation* predominates over congestion; delirium, coma, or other cerebral symptoms.

Arsenicum.—*Chronic disease;* diminished urine, with albumen, renal epithelium, fibrine casts, and blood-corpuscles; post-scarlatinal Nephritis; Ascites, Hydrothorax, and general Anasarca; Pericarditis, if the effusion be great; Inflammation of the serous membranes; granular or fatty degeneration.

Chelidonium.—Desquamative Nephritis; renal irritation; cylindrical casts with epithelial cells; swelling of the extremities; complication with Pneumonia.

Colchicum.—*Granular degeneration* from lead (*Plumb.*, if not from lead); decreased elimination of the organic solids; sequel of the Albuminuria of pregnancy; valvular disease of the heart; Pericarditis; *gouty* diathesis; affection of the retina.

Ferr. Phos. and *Plumb* are also useful.

Schmidt says he has obtained the most brilliant result by an exclusive milk-diet, when all other treatment had failed. An adult will sometimes take as much as a gallon in the twenty-four hours. It may be given cold or tepid, and from half a pint to a pint at a time. A preponderance of vegetable food, which makes less demand upon the secretory function of the kidneys than nitrogenous products, is likely to facilitate the success of remedial measures.

Accessory Means.—In the acute disease, warm-baths, or vapour-baths, should be had recourse to early, to promote the functions of the skin, lessen the Dropsy, and to carry off from

the blood deleterious matters which may be retained in it by inaction of the kidneys. Vapour-baths are preferable to warm-baths, because they can be used at a higher temperature. The action of the bath may be much prolonged, and the bath in consequence rendered more efficacious, in the following manner. The patient is enveloped to the neck in a sheet wrung out of warm water, and three or four dry blankets are closely folded over it. He should be afterwards quickly dried, and wrapped up in blankets. If there be much Anæmia, warm-baths should be employed with discretion. Further, to favour the free action of the skin, warm clothing—flannel and woollen garments—should be added, and chills and draughts guarded against. In chronic or convalescent cases, a healthy residence is necessary, including a sandy or chalky soil, and mild, dry air, so that out-of-door exercise may be taken. Patients with symptoms of Bright's disease should be encouraged to take abundance of open-air exercise as long as strength permits, chills and fatigue being guarded against. Bathing or cold sponging, and frictions with a sheet or bath-towel, tend to arrest the disease and invigorate the health. A continental residence is preferable in many cases. By such means, and the administration of appropriate remedies, patients suffering from chronic disease of the kidney may live for years, enjoying the pleasures and fulfilling the duties of life.

194.—Cystitis (*Cystitis*)—Inflammation of the Bladder.

Definition.—Inflammation of the mucous membrane of the bladder—diffuse, serous, adhesive, suppurative, or ulcerative.

a. Acute Cystitis is a disease of rare occurrence, except when arising as a metastasis of Gonorrhœa, or from wounds, Calculi, the introduction of instruments, or other mechanical causes. Occasionally cold or damp may induce it.

Symptoms.—Usually pain, sense of weight, tenderness on pressure, and extreme irritability in the region of the bladder; rigors; and often alarming constitutional disturbance. The urine is ejected by a sort of spasmodic action as soon as it

collects, with straining, and, generally, much suffering; and there may be discharge of mucus or pus, tinged with blood.

b. Chronic Cystitis—catarrh of the bladder—is more common; it may be the sequel to an acute attack; or it may be caused by Calculi, disease of the prostrate gland, Stricture, etc.; but the most common cause is inability of the bladder to empty itself, either from loss of muscular power of its coats, or prostatic enlargement. The decomposing urine then becomes a source of irritation to the mucous lining of the bladder; the urea is soon decomposed into carbonate of ammonia, and this salt is acrid and irritating, and the bladder in time acquires a condition which has been aptly compared to that of a badly-washed utensil.

Symptoms.—These are the same as described under the acute form, though to a modified extent: but while the pain is less, the discharge is generally greater. The mucus is often very abundant, a pint or more being passed in the day, and it becomes very tenacious on standing, so that when a vessel containing the urine of such a patient is emptied, an abundance of ropy mucus follows the urine in a mass.

Cystitis may thus be diagnosed from *Inflammation of the kidneys:*—in the former the pain travels *upwards*, towards the loins; while in the latter the pain extends from the loins *down* to the bladder.

Treatment.—The treatment of Cystitis must be regulated by its causes and associations. When simple, and resulting from cold, *Acon.* in alternation with *Canth.;* if from exposure to damp, *Dulc.;* if there be much nervous irritability, *Bell.* For the chronic form of the disease, *Canth.*, *Cann.-Sat.*, *Apis*, *Eup.-Pur.*, *K.-Hydriod.*, *Puls.*, and *Chim.*, are the best remedies. The last remedy we have repeatedly found to be specially valuable.

Pereira and *Ac. Benz.* have also been prescribed with success.

Accessory Measures.—For the relief of pain, hot fomentations; and in acute cases, rest in the horizontal posture. The warm hip-bath; the abdominal compress; and mucilaginous drinks, favour recovery. *Washing out the bladder* is often useful; but only small quantities of tepid water—one to two

ounces—should be introduced at a time; as far as possible, too, the water should be introduced like the continued percocation into it of the urine from the kidneys by the ureters, or the sensitive organs will be offended and injured.

195.—Calculus (*Calculus*)—Stone—Gravel.

Definition.—A solid, calcareous concretion deposited in various organs—frequently in the kidneys, but most commonly in the bladder. When a precipitate is let fall from the urine after it has been voided, it is called a *Sediment;* when precipitated in the bladder or kidneys, it is called *Gravel*, the urine being muddy as it passes; and when gravel, lodging in any of the urinary passages, becomes concrete, it is called *Stone.*

Diathesis.—When the urine of a person habitually presents any one kind of deposit, he is generally said to have a corresponding *diathesis;* as the lithic diathesis, etc. The *lithic diathesis* is characterised by yellow, red, brick-dust, or pink deposits; or by the formation of red gravel. The *phosphatic diathesis* is characterised by white sediment or gravel.

Varieties.—There are several varieties of Calculus; but the most common are, the uric or lithic, the phosphatic, and the oxalic.

The *lithic* deposit is observed in fever, chronic hepatic disease, etc., forming pink or brick-dust-like colouring-matter in the urine. When this is abundant, as in more advanced stages, it is commonly called *red-gravel.* The lithates chiefly occur in robust persons of florid appearance, who live high and suffer from irritable gastric Dyspepsia; and sometimes are associated with Rheumatism and chronic skin diseases, but most frequently with *Gout.* The uric acid condition often alternates in the same individuals with Gout; even in generations this may be observed, Gout manifesting itself in one, Gravel in the second, and Gout again in the third. This is the most common variety, and may occur at any age.

The *phosphatic*, unless arising from changes in the bladder, usually depends on atonic Dyspepsia, and an anæmic or

broken-down state of the constitution, and occurs chiefly in the aged.

The *oxalic* is consequent on feeble powers of assimilation, and exhaustion of the nervous system, from over-work, anxiety, or venereal excesses. The patient is usually pale and hypochondriacal, and suffers from disturbed sleep, acidity, etc. There is no gravel or sediment, properly speaking; the particles of oxalate float as crystals in the urine, or subside if it be allowed to stand, but not in large quantity.

Formation. — There are three methods in which this abnormal concretion is formed: (1) In the secreting cells of the kidneys, by deposition; (2) in the bladder, by precipitation, consequent on stagnation of the urine or otherwise; (3) in the bladder, by aggregation around a foreign body.

Renal Calculi.—By far the most frequent source of Stone is the escape of the small Calculus which has been formed in the kidney, but which does not pass through the urethra with the urine. It not uncommonly lies in the bladder as a foreign body, around which deposits of urid acid or urate of ammonia are collected. When the deposit takes place in the kidneys it invariably occurs at the apices of the mamillary processes, the extremity of the ducti papillares. There it appears to be retained under certain conditions in the form of calcium, oxalate and triple phosphate. And those conditions exist most frequently during childhood, early youth, and old age, when the tissues are in process of formation or degeneration. Renal Calculi are also the frequent sequelæ of any disease which depresses the vitality of the system, of blows on the loins, strains of the back, or any constitutional diathesis which causes lessened nutrition and degeneration. But in all probability the deposit in the kidney is due to inactivity of some allied organ, especially the liver, which, by the imperfect discharge of its functions, throws upon the kidneys more work than properly belongs to them. The result is an undue formation of urinary salts, which are not held in solution, but become crystallised. It should be observed that a much larger Calculus will pass through the urethra that can possibly pass down the ureter.

Vesical Calculi.—The immediate primary precipitation of

a Calculus is consequent on either an excess of insoluble material eliminated in the urine, or on stagnation of urine in the bladder, as the result of Paralysis, Cystitis, or other disease of the organ, or of the prostate and urethra.

The formation of a Calculus by precipitation around a foreign body is due to a well-known chemical law. Any body, whether introduced from without or existing within in the form of coagula of blood, fibrine, etc., causes the secretion of alkaline fluid, decomposition of the urine, and the ready deposit of salts around itself.

But Dr. Carter maintains that urinary Calculi are not formed by the mere precipitation and aggregation of ordinary crystalline and amorphous deposits. He affirms that in certain conditions of the urine, or of the mucous secretions of the ureters, bladder, or urethra, a colloid substance is eliminated by *molecular coalescence;* that small, firm, rounded, amorphous bodies are thus formed which constitute the nucleus of the Calculus. The mucus around the nucleus acts as a colloid substance; this induces further *molecular coalescence,* and thus fresh layers are added to the original nucleus.

Composition of Calculi.—The chemical ingredients of the most common Calculi are uric acid and the urates, with their modifications, the oxalates, uric oxide and cystic oxide. Those of the less common are all the varied combinations of phosphorus. Other organic matters are also present. There is a third class of Calculi of rare occurrence. The consistence is dependent to some extent on the chemical composition of the stone, on the cohesiveness of the particles, on the amount of moisture; it may be as soft as mortar or as hard as marble. The phosphatic Calculi are usually soft, the uric hard, the oxalate harder still. A stone quickly formed is not so dense as one that has been a long time in formation and of small size.

History of Stone.—In the *adult male,* Stone is most common between the ages of fifty and seventy, or, perhaps, between the ages of fifty-five and seventy-five; and it has a history something like the following:—A Calculus in eighteen or nineteen cases out of twenty has *uric acid* for its basis, the

uric acid (or gouty) tendency being hereditary ; and the first symptoms are frequent deposits of pinkish matter in the urine on cooling, resembling minute particles of cayenne pepper, which are first formed in the kidneys. When a patient habitually or frequently passes urine which yields a pinkish deposit on cooling, and which cannot be traced to cold weather, errors in diet, or other accidental causes, he has the uric acid diathesis. Afterwards, these cayenne-pepper-like particles become aggregated, forming little Calculi, popularly known as "sand" or "gravel" ; then, again, these tend in time to become larger, often as large as peas. During the descent of the Calculus from the kidney to the bladder, the patient complains of severe pain in the back, hip, groin, and testicle, and great discomfort. In a day or two, or earlier, it is usually voided with the urine, and thus the matter is disposed of. But when the bladder is unable to expel the Calculus by its natural efforts, the Calculus increases in size, by deposit on its surface, and in time a Stone is formed that cannot be removed except by an operation.

Stone in the Female.—The disorder is not nearly so common in woman as in man, the proportion being apparently about one to twenty. But in all probability it really exists in larger proportion, the symptoms which indicate it being attributed to uterine derangement, and the comparative facility with which Stone may be passed by the female diminishing the opportunities for detection. This facility is consequent on the shortness of the female urethra, and its capability of dilatation, the absence of a prostate behind which the Calculus can rest, and the more regular and temperate habits of females. The origin of Stone is the same as in men, but there is more probability of its occurrence from the presence of some foreign body which has inadvertently passed through the urethra into the bladder. The symptoms in the female closely resemble those in the male. The detection of Stone with the sound is comparatively easy, because the passage is short, and because the fundus of the bladder can be examined through the vagina as well as through the rectum. It is also often possible to pass a small oiled finger through the urethra itself, and thus detect the Stone.

Stone in Boys.—The preceding observations refer to Stone in the adult male bladder. But sometimes Stone forms in the bladder of boys, the symptoms being frequent micturition, severe pain in passing water, occasional sudden stoppage of the urine, with accession of pain at the end of the penis, sometimes discharge of blood or muco-pus in the urine, and lithic acid deposits. The operation for removal of Stone in boys under fifteen years old is by *cutting* and not by *crushing*. The former is a very successful operation in children; but the latter, unless the Stone is very small, is a difficult one, owing to the irritability of the bladder, and the small size of the urethra at that age.

Symptoms.—There are four leading symptoms that are very conclusive. (1) *Increased frequency of passing water*, chiefly during the day, and when moving about, and less so at night, or when at rest. Riding on horseback, for example, greatly increases the frequency. (2) *Pain in the glans penis during and immediately after micturition*, and a continuous desire to pass water for a few minutes until fresh urine trickles down and separates the stone from the lining of the neck of the bladder, which is a highly sensitive part. As soon as sufficient urine collects, relief is experienced. Pain at the end of the penis is highly diagnostic of Stone in the bladder. *Pain low down in the abdomen* is generally due to chronic Inflammation of the bladder. Pain *before* urinating is generally caused by a sensitive or inflamed mucous membrane. (3) The *urine contains muco-pus*, such as is found in Cystitis, only to a greater amount. With Calculus the urine is almost invariably clouded by mucus or pus.* (4) *Blood is passed from time to time*, and the quantity is *increased* by much *exercise*, such as riding in a springless carriage, or over a

* It is important to discriminate between urine clouded by mucus or pus and urine clouded by deposited salts. In cold weather the urine, on cooling, readily deposits its lithates, where none would be seen in hot weather. On the application of heat it becomes quite clear, which is never the case if the thickness be caused by pus or mucus. Occasional thickness of urine from lithates is of no great importance. But if the deposit be constant and heavy, habits must be corrected, diet restricted, and Indigestion removed. If the urine does not become clear with heat, an organic compound is the cause of the thickness, and the source of it must be investigated.

rough road, on horseback, much walking, and by all rapid movements of the body. But if the patient remain quiet no blood at all may be passed, or a mere drop or two with pain in the last expulsive effort at urination. Generally, the urine has a florid tint, while blood passed from the kidneys gives the urine a brownish colour, from long contact of the urine with the blood. The same remark applies to Hæmorrhage due to enlarged prostate.

Further Evidence.—The four symptoms above enumerated, occurring simultaneously, unmistakably indicate Stone in the bladder. But if additional evidence be desired, there are the chemical tests of the urine, involving the application of various chemical re-agents, and the *sound*. The latter is a polished steel instrument, bent a little shorter than the ordinary catheter, by means of which nearly every portion of the bladder can be explored. A large stone can thus be readily detected by touch and hearing, but a small one requires skill and care. It is important, however, to be able to find a small one, if present, as it can then be generally removed by the operation of *Lithotrity*. A better acquaintance with the subject of this Section will lead to the early detection of Stone, and, when it is sufficiently small to admit of being removed entire, or crushed in the bladder, so that the particles may be removed, there is a fair probability of success.

Great attention has been paid to the discovery of some *lithotriptic*, or means of dissolving Stone by chemical or other agents, but hitherto no satisfactory remedy has been discovered. Electrolysis has been only partially successful. The injection of solvents into the bladder has also been sedulously tried, but without favourable result. The action of the solvents is slow, and the danger of injury to the coats of the bladder is considerable, and is not counterbalanced by the rapid disintegration of the Stone.

Surgical Treatment.—*Lithotrity*—the removal of small Stones from the bladder, or the crushing of a large Stone in the bladder and the removal of the fragments—has now reached considerable perfection, so that ordinary favourable cases have therein an effective remedy. If the presence of

Calculus be suspected, it is of highest importance to diagnose the fact, and to ascertain the size of the Stone as speedily as possible. The smaller the Stone the more difficult its detection, but the more easy its removal. For examination the bladder should be nearly empty, and the pelvis raised by a pillow. A light sound, with a short beak, easily held by the thumb and finger, and turned by them in the urethra and bladder, should be employed. In all probability the instrument will graze the Stone as it passes the neck of the bladder. If not, that is the locality where it is most likely to be found, on further search; there, too, would lie any fragment that remained after crushing. It has been pointed out that the dangers of lithotrity are but two—injury to the soft parts by the instruments employed, and injury from the sharp edges and angular forms of the fragments produced; and affirmed that with few and simple instruments, without preliminary injections and subsequent washings-out, a Calculus of certain weight and of the size of an ordinary nut, may be removed without crushing with the most complete success. The smaller the Stone, and therefore the earlier the diagnosis, the greater probability of cure. If the Stone be larger, the principal requirements are that the lithotrite be so simple, compatible with strength, that the force in using it be so applied, and that the pieces into which the Calculus is crushed be so small, that the delicate canal to be passed and the sensitive organ to be invaded shall be disturbed and irritated as little as possible. The smaller the Stone, the fewer the operations, the greater is the probability of success. Mr. Napier has invented an instrument, "the Calculus Extractor," which envelopes the Stone or fragments with a delicate elastic wrapper, so that the hard contents may not injure the urethra on withdrawal.

Lithotomy is the removal of Stone by incision through the perineum, the hypo-gastric or supra-pubic region, or the rectum. By the successful practice of Lithotrity this is rendered less necessary in ordinary cases. It is, however, preferable for children, whose organs are smaller, and whose recuperative power is greater, than in adults.

Prevention of Calculus Disease.—For the Indigestion

and other symptoms which precede the formation of Calculus, a three or four weeks' course of Friedrichshall water has been recommended; six to eight ounces with four or five of hot water constituting a dose, taken every morning an hour before breakfast, diminishing the quantity gradually, till about half the quantity suffices. After the Friedrichshall, Wildungen, or Carlsbad water may be given in the same manner. Pullna water and Vals water, alternately, have often an admirable effect.

The classes of aliment which it is specially necessary to restrict are:—(1) *sugar*, in whatever form or combination this substance is presented; (2) *fatty matters*—butter, cream, and fat meat—whether simply cooked or in the form of pastry; (3) *alcohol*, especially in the form of sherry, port, and the stronger wines; tea and coffee; also strong beer, champagne, etc. Abstinence from these substances is recommended on the ground that the labour of the liver will be thus greatly lightened, and correspondingly the vicarious work of the kidneys will be diminished. Filtered rain, or distilled water, rendered alkaline by soda or caustic potash, has a great solvent power, and may be taken to the extent of one or two pints daily. Further, a fair amount of open-air exercise daily, and the promotion of the healthy functions of the skin by bathing, frictions, and suitable clothing, as directed in the first part of this *Text-Book*. The preventive treatment suggested in Sections 65 and 66 on Gout should be consulted, as the conditions are identical.

Treatment of the Diathesis.—Patients having a predisposition to the formation of Stone, especially if they have passed Calculi with their urine, require *medical* treatment and careful supervision to correct the tendency; for although useless to remove a Stone of size, remedies aid in the expulsion of sand or gravel, and also correct the tendency to such formations. Under our treatment many patients who formerly passed small Calculi have entirely ceased to do so.

First and foremost, all avoidable causes must be removed —high living, the use of alcoholic liquors, and insufficient exercise, on the one hand; and over-work, anxiety, and excesses of all kinds, on the other. Occasional abstinence from

animal food for a time is advantageous. Succulent vegetables and fruits should be preferred. Lemon-juice is corrective. Milk diet and frequent draughts of pure water are also recommended. Dyspeptic symptoms should be met by such means as are pointed out in Section 168; and any other concurrent disorders should be corrected. Removal to a locality where pure soft water can be procured is often alone curative.

Medicines.—The following are probably the most successful:—

1. *Renal Calculi.*—Ac.-Phos., Lyc., Berb. ϕ, Canth., Podoph., Cann.

2. *Spasm whilst Passing.*—Nux V., Gels., Acon., Cham., Calc. China. Hot hip-baths or fomentations. Hypodermic injection of Chloroform or Morphia.

3. *Vesical Calculi.*—Cann., Lyc., Ac.-Oxal., Canth., Chin.-Sulph., Ac.-Nit., Ac.-Phos., Graph., Sarsa., Nat.-Carb., Podoph., Merc. (*for early symptoms*).

Citrate of Lithia, in doses of fifteen grains each, twice daily, increases the secretion of the kidneys, and dissolves or washes out the gravel, particularly "red sand," or "cayenne pepper."

Ozonic Æther, ʒss.—ʒj., thrice daily in water, is said to have a solvent action on uric acid Calculi.

Wildungen Water.—The waters of this place are by many German physicians considered a specific for all disorders of the urinary system. A month's sojourn at this watering-place has frequently restored many person to perfect health.

But to prescribe for a patient with Stone in his bladder such remedies as *Cann.*, *Bell*, *Nux V.*, or *Ac.-Phos.*, to remove the pain and frequency of Micturition; or Vichy water to correct the altered urine; or *Ham.*, or *Canth.*, to arrest the hæmorrhage, is useless, except to afford temporary relief; it would be wasting precious time, and throwing away the opportunity of cure which operation offers. A large Stone, requiring surgical operation, is the growth of years, and can only occur in those who, notwithstanding a long period of suffering, disregard the clearest warnings, and neglect to seek that aid which surgery is able to afford.

196.—Irritability (*Vesica irritabilis*), *and* Spasm of the Bladder (*Spasmus vesicæ*)—Strangury—Difficult Urination.

These conditions are usually consequent on some diseases of the urinary organs—Cystitis, Calculus, Gonorrhœa, etc.; or are associated with Gout, Hysteria, or other conditions.

Symptoms.—Frequent desire to urinate; the fluid is forcibly or spasmodically ejected in small quantities; and its passage is attended by burning, aching, or spasmodic pain (*Strangury*); the pain is confined to the bladder, or extends to the end of the penis, round the pelvis, or down the thighs. The urine may or may not be unnatural; but when the disease has become chronic, mucus or pus is passed with it (*Catarrh of the bladder*). In children, irritability of the bladder is sometimes caused by worms (see Section 178).

A person in health passes water on an average about five or six times a day, and has not to rise generally in the night for this purpose; but when there is any degree of inflammatory action of the bladder, the inflamed mucous membrane cannot bear much distention, so that five or six ounces of urine, or even less, excite a desire to urinate, although under healthy conditions the bladder contains without inconvenience fifteen or sixteen ounces.

Epitome of Treatment.—Nux V. (*Spasm*); Ferr. (*simple irritability during the day*); Bell. (*irritability in children and hysteric females*); Apis (*Strangury*); Acon. (*Strangury from cold*); Dulc. (*from damp*); Camph. (*in urgent painful cases*); Canth. (*with or after Inflammation of the parts*); Lyc. (*with much red sediment or Gravel*). Caust., Senega, Copaiba, Tereb., Berb. are also useful.

Accessory Means.—Mucilaginous drinks, the warm hip-bath, etc. It is unnecessary to remind the practitioner that Strangury is not a disease *per se*, but a symptom resulting from various causes, the removal of which is necessary before the bladder can regain its healthy sensitiveness and tone.

197.—Incontinence of Urine (*Incontinentia urinæ*)—Wetting the Bed.

Definition.—Partial or entire loss of power to retain the urine in the bladder. As stated of Strangury in the preceding Section, so Incontinence is not a disease *per se*, but a symptom dependent upon one or more of various causes. The patient may have an almost constant urging to pass water, which, if not immediately responded to, results in an involuntary discharge, but there is no pain or spasm as in Strangury. If the patient be troubled with a cough, the inconvenience is much increased, as during each paroxysm the urine escapes. When the loss of voluntary power is more complete, the urine continues to dribble away as fast as secreted. The constant discharge excoriates the parts, causing soreness when moving about; at the same time, an offensive urinous odour is exhaled from the person, which renders the condition most distressing.

The majority of patients are *young*—from three or four up to fourteen or sixteen years of age—and the symptom is most troublesome at night.

Causes.—*Reflex action*, from many and diverse causes. Consequently, successful treatment can only be adopted after a careful investigation of the causes. Paralysis of the bladder is but an infrequent cause. It may result from injuries, the pressure of Tumours, Calculi, syphilitic disease, or constitutional causes. In children, the most frequent causes are *irritation of the bladder from worms;* strumous constitution; too large a quantity of warm fluids, especially if taken towards evening; improper food or drink, causing acid urine, which *irritates* the mucous coats of the bladder, etc. The urine of children who wet their beds an hour or two after falling asleep may often be found loaded with lithic acid crystals.

Diagnosis.—One or two points may be determined by an inquiry as to whether the incontinence is most troublesome in the day-time or at night. *Stone in the bladder* does not cause much disturbance at night; but in the day-time, when moving about, it occasions frequent cause to micturate. On

the other hand, an enlarged prostate is most troublesome at night, when frequent calls to pass water are made. If this symptom occur in a patient about sixty years of age, who has only recently had urinary troubles, and these are greatest at night, an enlarged prostate gland is the most probable cause. Lastly, in obscure cases, diseases of the brain, spinal cord, kidneys, bladder, or rectum, should be examined for; and the possibility of masturbation, or the existence of obvious causes of irritation about the external genitals, should not be forgotten. Among the latter, we may especially mention *congenital Phimosis*, which, in consequence of the hindrance it offers to strict cleanliness, allows the secretions to accumulate around the gland and become a source of irritation. In these cases circumcision is the remedy, and is generally effective.

"These cases may be broadly divided," writes Dr. J. W. Hayward, "into two chief classes: (*a*) those depending upon deficient nervous or muscular action; (*b*) those which have for their cause an excess of this action. The normal retention and passing of urine depend upon the proper balancing of the expulsive and retentive forces—that is to say, of the muscular walls and of the sphincter of the bladder. And this balance may be disturbed either by want of sphincter power, or an excessive expulsive power. Now the first of these, the want of sphincter power, is, I believe, in children, much the less frequent of the two causes, and is usually associated with delicate health, spinal curvature, talipes, or other paralytic affections; it is also the more troublesome to cure. The second and more common cause, the excess of expulsive power, occurs, on the other hand, in perfectly healthy children, and may depend upon the condition of the urine, or of the bladder, or upon some neighbouring or eccentric irritation, and is of the two much the more easily remedied. There is also, no doubt, a certain, but I believe a small, number of cases dependent upon mere indolence and bad habit; these must be treated by careful management, and, if need be, punishment; which, I may remark, should not depend upon the temper or caprice of a nurse, but should be carried out in an intelligent manner."

Treatment.—The chief remedies are—Bell., Gels. (*in the aged*); Canth., Nux V., Ac.-Phos. (*with alkaline urine, and in hysterical females*); Podoph., Calc.-C., Ac.-Nit., Opi., Lyc., Ac.-Benz. (*highly-coloured and strong-smelling urine*); Cin., Spig., or Arg.-Nit. (*from worms*); Ferr., Phos., Sil. (*diurnal*); Scilla (*profuse discharge*); Acon., Bell., Canth., Sec., Chlor.-Hyd., Ferr.-Mur., or Cham. (*in children with uneasiness in micturating*).

Gelseminum.—Relaxed or paralytic condition of the sphincter

of the bladder, leading to involuntary urination night and day.

Additional remedies are *Sep.*, *Kreas.*, *Caps.*, *Caust.*

Accessory Means.—As Incontinence of urine is generally the result of disease, corporal punishment cannot correct the annoyance, but only medical and general treatment, which must be entirely regulated by the cause. In timid children, the fear of punishment would only increase the morbid tendency. All salt, sharp, and sour articles of food, malt-liquors, spirits, tea, and coffee should be avoided. Meat may be eaten in moderate quantities, but only a small quantity of fruit, and no food likely to produce flatulence. Nothing *hot* should be taken in the after-part of the day. Simple water, milk-and-water, and cocoa, are the most suitable beverages. Cold water or mucilaginous drinks, in moderation, tend to diminish the acrid properties of the urine. The mother or nurse should be quite certain that the child fully empties his bladder before getting into bed, as a child when tired or sleepy is apt to avoid this. Until the cause is removed, the patient should be taken up once or twice in the night to urinate ; in cold weather the vessel should be placed to him in the bed. A patient who wets his bed should sleep on a hard mattress, with light clothing, and not be permitted to lie on the back ; this may be prevented by fixing an empty cotton reel so as to press on the muscles as soon as the patient lies on the back. He should be prevented from falling into a morbidly profound sleep, as it is then that the discharge of urine occurs. Heavy sleep may be obviated by waking up the patient about the second hour of sleep, or, in case of adults, by an alarum to rouse him at the proper time. At bed-time, a warm bath at 90° to 98° Fahr., or a warm sitz-bath, or cold sponging of the lower part of the back, is often of great value, and greatly contributes to the success of the treatment (see Sec. 32). Patients should take much open-air exercise, and have shower-baths or ablutions with *cold* water every morning: the whole process, including drying with a bath-sheet, should not occupy more than a few minutes.

Children troubled with nocturnal Incontinence should be

taught to retain their water as long as possible during the daytime, that the sensibility of the bladder may be lessened.

198.—Retention of Urine (*Retentio urinæ*).

Definition.—Obstruction to the discharge of the urine.

Diagnosis.—Retention is liable to be confounded with *Suppression* of urine; but in the latter condition, the kidneys are the seat of the disease, and do not secrete the urine; in Retention, the urine is secreted, but the fault is in the bladder, its sphincter, or in the course of the urethra, in which there may be some cause of obstruction, as Stricture, enlarged prostate, etc. Suppression may be easily distinguished from Retention, for in the latter disease the bladder is distended with urine, and may be felt at the bottom of the abdomen; while, in Suppression, the bladder is empty and can scarcely be felt. If it be deemed necessary to introduce the catheter, the diagnosis will be confirmed: in Retention the bladder will be found full, but in Suppression empty; the latter condition, however—except in temporary cases, when *Tereb.* will be rapidly curative—is extended with extreme peril, as the urea and other elements of urine accumulate in the blood when the kidneys have become diseased, and no longer secrete the urine; the patient becomes uneasy, then drowsy, and soon Coma and effusion upon the brain supervene.

Causes of Retention.—It may be from inflammation, dependent on sudden stoppage of purulent discharge from the urethra; or organic stricture; or enlarged prostate gland; acute febrile disease; fibrinous exudations, causing Stricture; injury, causing Paralysis of the lower part of the spinal cord; loss of tone in the muscular structures of the bladder, leading to Paralysis of that organ, and common in old age.

Treatment.—*Aconitum—Inflammatory symptoms*, often in alternation with some other remedy, especially *Cantharis*.

Camphor.—Spasm at the neck of the bladder, especially if caused by *Cantharides* (a drop on a piece of loaf-sugar every fifteen minutes for three or four times).

Cantharis.—Urging to urinate; *cutting and tearing pains.*

Clematis.—Difficult passage of urine; heat or slight burning, with occasional stitches in the course of the urethra while passing water.

Nux Vomica.—Painful, ineffectual efforts to urinate, *from the use of wines or spirits.*

Sulphur.—In alternation with the last remedy, if the patient be troubled with Piles.

Can., Tereb., Uva, Ac.-Phos., Bell., Ign., Opi., Iod., Ars., Chim., are additional remedies often required.

Accessory Means.—The introduction of the catheter, so frequently resorted to under the old treatment, is often superseded by the more efficient remedies we employ; still it may be necessary in some cases. External applications—warm baths, hot fomentations—bland drinks, and injections by the rectum, greatly aid the medicines in restoring the functions of the parts, if there be not incurable organic disease. The diet should be sparing, and, in some severe cases, restricted to barley-water, gum-water, or other diluents.

See Section on "Stricture of the Urethra."

199.—Gonorrhœa (*Gonorrhœa*)—The Clap.

Definition.—A specific disease characterised by inflammation of, and a purulent, or muco-purulent, discharge from, the mucous membrane of the male or female urethra and contiguous portions of the genital organs, produced by the contact of a specific virus.

A specific virus, however, although the most frequent source of the disease, is not the only one, for there is abundant evidence that it may be generated without any specific elements, as stated under "Causes."

Literally, the word "Gonorrhœa" means a "flow of semen," and was so named by the older writers, who erroneously regarded the discharge as one of seminal fluid. The specific virus contained in the discharge is distinct from that of Syphilis, and does not affect any other tissue except the mucous, although the mucous membrane of eye, nose, or anus,

may furnish the specific poison if inoculated with the pus of a membrane similarly affected.

But although Gonorrhœa is the most frequent disease of the generative organs contracted by impure congress, there are two other well-defined and distinct diseases originating mostly in the same source. These are:—

1. The soft, contagious, suppurating Ulcer of the genitals, which may produce extensive destruction of the contiguous parts, but does not infect the constitution.

2. Syphilis, which, limited at first, soon infects the whole system, and induces the more general morbid phenomena denominated Constitutional Syphilis. (See Section 68.)

There is every reason to believe that Gonorrhœa was known in very remote times, for it appears to have prevailed among the Grecks and Romans, and other ancient nations. The sanitary measures inculcated in the fifteenth chapter of *Leviticus* have reference, in all probability, to this disease. Indeed, it probably originated in excessive congress, associated with a want of cleanliness. An analogous disease appears to arise in animals under similar conditions.

Time and Order of the Symptoms.—Gonorrhœa declares itself in from two to eight days after an impure connection; in rare instances, in a few hours, or, in others, not for ten or fourteen days. The symptoms have been divided into three stages, the *initiatory*, the *inflammatory*, and the *chronic*.

The symptoms are at first only slight—a tingling or itching sensation, with some degree of heat in the urethra and at the end of the penis, especially when urinating. The orifice of the urethra soon becomes red, swollen, and adhering together by a thin whitish secretion, and if pressed between the finger and thumb, muco-pus exudes.

After a variable period, the symptoms increase, and as the inflammatory stage sets in, there are burning or scalding pains on passing water, with increased secretion from the affected part, at first thin, but soon becoming thick, milky, yellow, green, or even bloody; the orifice of the meatus is swollen and florid; the mucous membrane of the glans is swollen and inflamed, and the penis, especially along the course of the urethra, feels swollen and tender to the touch. Micturition may be

difficult, and passed in a spiral stream, or in jerks; and there may be pain and weight in the perineum, aggravated when urinating. During this stage, which is modified as to severity and duration by the constitution and habits of the patient, and by previous attacks, broken rest at night, a good deal of constitutional disturbance, and complications such as are afterwards mentioned, are prone to arise.

After the disease has continued for about seven to fourteen days, a climax is reached—the inflammatory symptoms begin to subside, and the chronic stage sets in: there is more or less irritation in passing water, and a yellow discharge, which, under unfavourable circumstances, may persist for a long time, and then terminate in an obstinate, thin, transparent, painless discharge of mucus or prostatic secretion. This stage is called *Gleet*, and is especially liable to occur in strumous, phlegmatic, rheumatic, or gouty constitutions and in debilitated patients, or such as are subject to chronic cutaneous diseases.

From peculiarities of the female organism, the symptoms are less severe when occurring in women, and resemble Balanitis in the male.

Balanitis, or External Gonorrhœa, is an inflammation of the surface of the glans penis, and the mucous membrane of the prepuce, with profuse purulent secretion. It usually occurs in young men with a long narrow prepuce, and is traceable to the same causes as Gonorrhœa proper.

Complications of Gonorrhœa.—(1) *Irritation, congestion,* or even true *inflammation of the urinary organs,* causing a frequent desire to pass water, but extreme difficulty and pain in doing so; or there may be complete retention of urine, from spasm of the neck of the bladder, excited by inflammatory irritation. (2) In the male, frequent and involuntary erections, crooked and painful, occurring chiefly during the night—*Chordee.* This condition is caused by an infusion of lymph or plastic matter into the spongy substance of the urethra, and is present in nearly every case of Gonorrhœa during the inflammatory stage, especially at night when *warm in bed.* (3) A thickened and constricted condition of the glans penis, and effusion under it, so that the foreskin cannot be retracted—

Phimosis. (4) Inflammation of the lymphatic glands of the groin—*Sympathetic bubo.* (5) *Inflammation of the testicles—Orchitis,* coming on at a later stage of the disease, when the discharge has nearly ceased, and is probably an extension of the inflammation of the urethra; it is marked by pain, greatly increased when the organs hang unsupported, excessive tenderness, swelling, fever, and, often, vomiting. (6) *Paraphimosis* —the foreskin being retracted over the glans and tightened over the penis, so that it is impossible to draw it forward. Terrible pain, and even sloughing of the parts, may ensue. Chronic Prostatitis, Stricture, Spermatorrhœa, and Warts, may complicate Gleet. (7) *Rheumatism* commencing when the gonorrhœal discharge is profuse, or has been suddenly suppressed, and affecting the knee joints or other articulations of the lower limbs, and characterised by continuous pain, weakness, and rigidity. Fever and swelling are scarcely perceptible. It continues for an indefinite period, and is often chronic and difficult to cure. It seldom attacks women. It is generally associated with Ophthalmia.

Gonorrhœal Ophthalmia is considered in Section 110.

Causes.—The most common cause is a specific virus brought into contact with the urethra or glans penis during impure sexual connection. There is, however, abundant evidence to prove that the disease may originate in any discharge from the female organs of generation, the inflammation varying in severity according to the virulence of the infecting discharge. The menstrual fluid, acrid leucorrhœa, uterine catarrh, want of cleanliness, etc., in the female; or, an acid state of the urine, excessive coitus, foreign substances in the urethra, a gouty or rheumatic diathesis, the irritation of stricture, exposure of the organs to cold winds, etc., in the male, may give rise to a discharge having all the characteristics of Gonorrhœa. Even a sea-bath, fatigue, and such articles as beer, gin, asparagus, etc., have been stated to cause it in susceptible patients.

Messrs. Skey, Fournier, Diday, and other eminent surgeons, testify that the disease may originate in other causes than a specific virus, and be communicated by a woman who is not herself suffering from the disease.

EPITOME OF TREATMENT.—

I. *Abortive Treatment.*—One of the following injections:—

(*a*) ℞. *Hydrastis*, φʒ; Aquæ, ʒvi. M.

(*b*) ℞. *Argenti nitras*, grs. ij.; Aquæ des. ʒviij. M.

(*c*) ℞. *Zinci Sulph.*, grs. viij.; Aquæ des., ʒviij. M.

(*d*) ℞. *Vini Rubri*, Aquæ puræ *aa*, viij.; *Acid Tann.*, grs. xl. M. ft. sol.

II. *Inflammatory Stage.*—Acon., Cann., Canth., Merc.-Cor., Copa., Petrol. Also the use of a suspensory bandage.

III. *Gleet.*—Mer., Gels., Nux, Sulph., Agnus Castus, Hydrast., Petrol., Matico, Still.; also a recourse to the injections, the first named especially being of great value.

IV. *Balanitis.*—Merc.-Sol., Acon., Hydrast.

V. *Chordee.*—Acon., Canth., Gels., Arg.-Nit., Still.

VI. *Orchitis.*—Puls., Iod., Acon., Gels., Clem., Merc., Ham., Phyto. The testicles should be supported by a suspensory bandage.

VII. *Prostatitis.*—Bell., Atropine, Merc.-Iod.

VIII. *Rheumatism.*—Colch., Coloc., Ran.-Bulb., Rhod., Rhus, K.-Hyd., Sticta.

IX. *Stricture.*—Puls., Eupat.-Purp., Agaric, Clematis, Iod. (See next Section.)

X. *Warts.*—Thuja, Ac.-Nit.

XI. *Phimosis.*—Acon., Bell., Cann., Gels. Also warm baths, wet compresses, etc.

Dr. Burnett speaks well of *Aurum.*

LEADING INDICATIONS.—

Aconitum.—Inflammatory symptoms, both local and general, but especially when there is much constitutional disturbance—rigors, hot, dry skin, thirst, headache, full bounding pulse, etc.

Cannabis.—Intense local symptoms; pain, redness, and *great swelling* of the urethra, with profuse discharge, and difficult urination. Threatened Phimosis.

Cantharis.—Urinary complications, frequent desire to urinate, *scalding*, twisted or forked stream, *Chordee*, moderate discharge, leaving a yellow stain.

Mercurius.—Inflammation of the external orifice of the urethra, with itching and smarting on micturition. Discharge

first thin and watery, then thick and yellow, or *bloody*, and in the last stage just sufficient to gum the lips together in the morning. As a local application in *Balanitis*, when the inflammatory symptoms have been reduced by *Acon.*, the 1x trit. of *Merc.-Sol.* may be used. Wash frequently with warm water.

Petroselinum.—Discharge of yellow *glutinous* matter from the prostatic part of urethra, with tingling and pressure near Cowper's glands in the morning; easier when standing or sitting.

Pulsatilla.—Thin stream of urine, caused by contraction of the urethra, with discharge of blood. Ophthalmia, or Orchitis, from suppression of Gonorrhœa.

Stillingia.—Painful erections, with *burning and itching* during micturition. Threatened Cystitis.

Mezereum.—Discharge of watery mucus during exercise; pain and tenderness of the whole passage.

Gelseminum.—Spasm of the urethra; declining Gonorrhœa; Spermatorrhœa.

Hydrastis.—Chronic painless urethral discharge, with debility. In Balanitis, the dry powder as a local application is specific.

Nux Vomica.—Gleet, with exhaustion of the nervous system; depression of spirits, mental languor, etc.; with weakened digestion and constipation.

Ferrum Muriaticum.—Physical exhaustion from long continuance of Gleet; Anæmia.

Thuja.—Warts; uneasiness of the urethra and sensation as though a drop of urine were passing.

Sulphur.—Is specially useful in the sub-acute stages. Redness of the meatus, constant desire to urinate, itching in the canal.

Sepia.—In females. *Nat. Sulph.*—Constitutional.

Petroleum or *Matico.*—Chronic and obstinate Gleet.

Injections.—

The selection of the lotion, and the frequency of its use, must be determined by the circumstances of the case. A syringe, of a suitable size and form—the nozzle of the instrument being well lubricated—is necessary for the application

of the lotion to the diseased surface; also tact and care in the mode of injecting, upon which much of the efficiency of the lotion depends. This proceeding is strictly homœopathic, and if employed sufficiently early will often arrest the disease. If, however, *acute* symptoms have set in, astringent injections are improper. In the latter stage (*Gleet*), injections are again advantageous.

We mainly depend upon the following:—*Liq. Plumbi Diacet.* (ʒss ad aquæ dest. ℥j), and an infusion of *Hydrastis* ʒss ad aquæ dest. Oss). In addition to these, *Nitrate of Silver*, *Tannin*, *Limewater*, and *Cold water*, are often prescribed. (See Epitome of Treatment.)

Accessory Means.—In addition to the administration of remedies, a moderate, non-stimulating, and digestible diet should be adopted, excluding pastry, cheese, salt meats, coffee, spirits, wine, and beer; but extreme precautions are only necessary during the acute stage of the disease. Cold water, tea, barley-water, gum-water, linseed-tea, or similar diluents, may be taken *ad libitum*. Such beverages as barley-water, etc., are, however, simply useful as vehicles for conveying water; and pure cold water is superior to all other diluents. As the acidity of the urine irritates the inflamed urethral mucous membrane, much benefit may be derived from alkaline waters, as seltzer, which both dilute and neutralise its acid properties. Severe exercise should be avoided during the existence of inflammatory symptoms, and if these symptoms are severe, or if there is Orchitis, the patient should retain the recumbent posture as completely as possible. In cases in which some exercise cannot be avoided, a suspensory bandage should be worn.

The patient should sleep on a mattress, and avoid heating coverings. If he is in the habit of lying on his back, he may be prevented from doing so by securing an empty reel so as to press on the muscles and awaken him.

Frequent ablutions with warm or cold water, and keeping the parts as free as possible from the irritating discharge, are also necessary, as it is, probably, the infectious nature of this matter, operating as a continually exciting cause, which renders the disease so obstinate. Cold-baths or sea-bathing,

regular and early hours, and temperate habits, are often necessary to ensure successful results, while in obstinate cases fresh air and good nourishment are especially requisite.

Preventives.—Avoidance of intoxicating beverages and stimulating food, with quiet, rest in the *horizontal posture*, and frequent washing the parts with soap and water, will greatly aid in preventing the full development of the disease; the same means being also equally valuable for eradicating it when established.

200.—Stricture of the Urethra (*Strictura Urethræ*).

Definition.—A diminution of the calibre of the urethral canal, due either to the contraction of the mucous and submucous tissues, or to some deposit or growth which increases the thickness of the walls.

Pathology.—The Urethra is the canal of the bladder by which the urine is excreted, commencing at the neck of the bladder and terminating at the end of the penis. It is divided into four portions: (1) the *prostatic*, passing through the prostate gland; (2) the *membranous*, situated within the two layers of the deep perineal fascia; (3) the *bulbous;* (4) the *spongy*. By far the larger number of Strictures are found at the sub-pubic curvature, *i.e.*, near the junction of the membranous and bulbous portions; they are not found at all in the prostatic portion. The extent of the morbid condition varies with the extent of the inflammatory action and the duration of the complaint, but it is not often, if ever, that the canal is actually impervious. The flow of urine may be very narrow, or by drops only, but if there be actual retention, it is due to some other cause than the closure of the orifice by adherence of the sides of the canal. Dr. John Hunter classified Strictures as *spasmodic*, *inflammatory*, and *permanent;* the last, which is organic, is the only true Stricture. *Spasmodic Stricture*, or more properly *spasm of the Urethra*, is a transient, involuntary, and unwonted contraction of the urethral muscles, occasioned by repressed Gonorrhœa, super-acid or acrid urine, or too long voluntary retention of urine; is accompanied by great distress in the

act of emission, and should be regarded as a symptom to be overcome by improvement of the secretions and treatment of the primary disorder. *Inflammatory* or *congestive Stricture* is acute inflammation and swelling of the prostate (*Prostatitis*), with great tenderness in the perineum, painful micturition, narrow stream, and imperfect emptying of the bladder; it is, like spasm, transient, exceedingly painful, and to be treated as an inflammatory condition. *Organic Stricture* is permanent, and has been thus described: "The first effect of inflammation upon the mucous membrane is a swelling or thickening of it, caused by engorgement of the vessels. Then exudation of an albuminous fluid takes place into the sub-mucous tissue, and perhaps becomes absorbed under favourable circumstances. But when the morbid action persists, more or less plastic material is thrown out, the result of which is the formation of fibrous tissue around the canal, causing adhesion between the mucous membrane and the sub-mucous tissue, infiltrating the meshes of the latter, and even involving the substance of the *corpus spongiosum* itself." The effect is such a contraction of the duct that urine is passed in a thin stream, with very great difficulty and suffering, there being desire and yet reluctance to urinate.

Causes.—1. *Inflammation.* — Urethritis may be subdued, and leave the calibre of the urethra in its natural condition. But sometimes from constitutional cachexia, from indiscretion of the patient, or from unsuitable treatment, inflammation terminates in Stricture. The effect does not always immediately follow: a long time, perhaps years, may elapse between the acute attack and the permanent contraction.

2. Gonorrhœal discharge long continued is the primary exciting cause.

3. *Mechanical injury.*—Blows on the perineum by falling across spars, scaffolding, ladders, chairs, gates, etc.; by hard riding; laceration by falling on fences, by breaking of earthenware vessels, by fracture of the pelvis; injury by surgical instruments, may produce Stricture. The wounded canal may unite irregularly, or there may be loss of substance; induration will then take place, and a permanent cicatrix will form an organic Stricture.

Symptoms.—The earliest premonitory symptoms are slight urethral discharge; pain in the canal behind the stricture when passing water; and general uneasiness of the organ. As the constriction increases, the bladder is emptied at shorter intervals; the streams become flattened, perhaps twisted, spirting, or forked; then smaller, as thin as a thread; and finally the urine dribbles away incessantly, drop-by-drop. The urine is changed in character; that which remains in the bladder becomes decomposed, the mucous membrane is inflamed, and pus and mucus accompany the urine. The presence of gleet should arouse suspicion. The urine is generally alkaline, deposits mucus and phosphatic precipitate, and is covered with an iridescent phosphatic film. Blood is sometimes discharged, from the rupture of vessels by straining, or from the use of the catheter. The urine emits a disagreeable odour, excoriates the skin, stains the clothes, and renders the patient offensive. The discharge is ultimately uncontrollable; there are heat and soreness in the region; coitus is painful; there is tenesmus in the rectum; the digestive organs are disordered; the patient loses flesh and strength, and is subject to pains in the back, the loins, and to frequent Rigors; dilation or sacculi of the bladder is common; the ureters and kidneys are affected; and abscess and fistula are sometimes caused by urinary infiltration.

Diagnosis.—The symptoms thus described are not of themselves sufficient to establish the certainty of Stricture. Examination is necessary. A flexible catheter is the best instrument for determining whether there be an obstruction in the canal.

Medical Treatment.—

1. *Spasmodic Stricture.*—Camph., Gels., Nux V., local application of Bell. ϕ; injection of warm olive oil; warm fomentations and baths.

2. *Inflammation.*—Acon.; Bell. (*congestion*); Canth. (*cutting and tearing pains, priapism, discharge of blood*); Clem., Nux V., Merc.-Iod., Chim.

3. *Gonorrhœal.*—Cann., Hydras. ϕ, Clem.

Agar., *K.-Hyd.*, *Ac.-Nit.*, *Stram.*, *Arg.-Nit.*, *Sil.*, *Phos.*, *Berb.*, and *Eup.-Pur.* may also be found useful.

See also Section 198, on "Retention of Urine."

SURGICAL TREATMENT.—The chief consideration is how best to restore the canal to, and to maintain it at, its normal size. This is best attained by *dilatation*. It is more safe and certain, though more tedious, than division. The patient should be seen when warm in bed, with the skin moist, and the muscles relaxed. A hot hip-bath just before the visit may be beneficial. An injection of olive oil facilitates the passage of the instrument. This should be a small catheter, introduced at first for a few minutes only. Extreme caution should be observed in the introduction of the instrument. Nothing is to be gained by force. The catheter should be coaxed, not forced, into the passage. If there be the slightest appearance of blood, the attempt to pass the instrument should be postponed. The size of the instrument, and the time during which it remains in the passage, may be gradually increased. The advance should thus be progressive until the normal size of the canal be reached, the catheter admitted without pain, and the urine flow out naturally. The occasional use of the instrument may be necessary to render success permanent. *Acon.* and *Canth.* will control tendencies to inflammation, spasms, and rigors. *Urethrotomy*, or the division of the tissue composing the Stricture by incision, is sometimes *external*, the urethra being opened from the perineum behind the point of Stricture; or *internal*, the division being made through the canal from before backwards, or from behind forwards.

ACCESSORY TREATMENT.—Our opinion is that resort to surgical treatment is far less necessary than is generally supposed. The employment of medicines to correct constitutional and local cachexia will be found curative in many cases, in conjunction with rest, recumbency, warmth, and inunction.

It is of importance that all irritation of the parts caused by locomotion be avoided. Rest from the ordinary employments of life is therefore necessary, and *rest in the horizontal posture*. This should be continuous. It is also desirable that warmth should be uniformly maintained. Warm baths, warm fomentations, and warmth in bed, will facilitate the relaxation of

the stricture. So also will injections of olive oil, and external rubbing with it. At the same time, the food and drink should be non-irritating and simple. Condiments, salt and highly seasoned meats, wines, and spirituous liquors, should be generally avoided.

201.—Spermatorrhœa (*Spermatorrhœa*)—Involuntary Emissions.

Definition.—Involuntary seminal discharges, occurring either during sleep, or under various conditions at other times, and associated with irritability and debility of the generative organs.

This subject claims special attention for several reasons, more particularly the following:—The extreme frequency of the complaint; the moral and physical dejection which it causes; the too common indifference with which it has been met by the medical profession; the damaged health, and exhausted resources, frequently occasioned by charlatans, who find it a fruitful field for plunder; and, lastly, the comparative facility of cure when proper remedies are administered, and a judicious line of conduct is pointed out, and both are fairly persevered in.

Extent and Evils of the Habitual Cause.—Very extensive correspondence, and considerable private practice, have afforded us unusual opportunities of investigating this subject, and prove to us that the evils of the above condition are widespread, beyond the credibility of those who have not thoroughly investigated it. The notion that boys are ignorant of the subject, and that we ought not to remove that ignorance, is wholly incorrect. Self-abuse is of such extreme frequency, that it is a question whether even a majority of the youth of all classes of the community do not practise it. The consequences of the habit, even if they do not involve immediately fatal results, occasion the deepest mental distress, and too often disqualify the patient for the discharge of the ordinary duties of life. Unfortunately, we find such patients exhibit extreme feebleness in overcoming

incitements to sexual vices, inability to control the will being one of the most lamentable results of self-abuse. Instead of exercising mental and physical self-control, patients too often abandon themselves to self-reproaches and despair, and unless rescued by a prompt and strong, but kind hand, extreme demoralisation is inevitable.

Our experience forces us to the conclusion that, notwithstanding the magnitude of the evil, the subject has been much overlooked, or under-rated, by medical men generally. We are frequently told by patients that medical men appear to ignore the functional diseases of the generative organs, and manifest indifference with respect to the matter. The whole question demands far more attention from the profession than it has yet received, both on account of the physical and mental sufferings involved, and the charlatanism and imposture which professional neglect encourages. Numerous cases have come under our notice in which shattered health and exhausted resources have resulted from sufferers falling into the hands of the host of advertising quacks who in large towns prey on patients of this class. Newspaper proprietors, especially provincial, are great offenders against public morality by opening their columns to quack advertisements, and thus prostituting a powerful influence to co-operation with charlatanism.

Many patients have expressed to us their regret that they never received any instruction on sexual subjects, or warning of the danger of masturbation. Boys, and girls too, are certain to have their curiosity excited, and if information be withheld, to seek it in improper channels. To suppose that boys who watch animals, and obtain intimations from literature, and hear the conversation of the immoral, can be kept in ignorance, is evidence of profound want of knowledge of human nature. Better, from every point of view, to furnish proper instruction and warning.

Causes.—Spermatorrhœa is most frequently the result of a direct violation of a great physiological law, the habit of sexual excitation—*self-abuse*—either accidentally acquired or learned from associates, as in schools, and subsequently continued under the influence of a morbid imagination, or from

the excitement occasioned by impure books or conversation, reports of divorce-court trials, etc., often in ignorance of the consequences of the vicious practice. Schools, especially boarding-schools and colleges, are often fruitful sources of instruction and initiation into this vice. From innumerable frank personal disclosures made to us in our professional capacity, we have ground to conclude that schools are the very hot-beds of this degenerating habit. Other causes may be,—morbid conditions of the urethra; irritability of the bladder, as shown by wetting the bed; Indigestion with constipated bowels, violent contraction of the levator ani, causing an escape of semen; rectal irritation from *Worms*, which occasion scratching or friction, and thus lead to determination of blood to the organs; Piles, acting in a like manner; Prolapsus ani; a too long or narrow prepuce, or the collection of secretions under the prepuce, causing irritation; horseback exercise; frequent excitation of the sexual passion without natural gratification; sexual excesses; disease of the brain or spinal marrow; chronic exhausting diseases, as Phthisis, etc.; a too stimulating climate, and a preponderance of males over females, may be causes of solitary vice. Lastly, we are led to conclude from cases that have come under our own observation, that the causes of masturbation are sometimes inherent. Under such conditions, the organs become extremely debilitated, and liable to excitement, with secretion and discharge of seminal fluid, from slight emotional causes —a thought, a glance, a word;—or trivial and common physical agents—the oscillations of a carriage, the contact of the saddle in riding, climbing, the efforts of straining at stool, will even in the healthiest male occasionally cause the vesiculæ seminales to be emptied.

Effects.—These are often greatly exaggerated in the suggestive pamphlets of those who prey upon this class of patients. Nearly all the patients who consult us have previously read one or more of these pamphlets, and have had their happiness destroyed by the alarming and overdrawn statements they contain, every nervous sensation or symptom of indigestion being connected with Spermatorrhœa, as cause and effect. According to our own observations, the following are the most

common results of this sexual vice: depression of spirits, often to an extreme degree; bashfulness, and inability to look frankly into the eyes of another, especially of the same sex; weakness of memory and other senses; enfeebled intellect; indecision and loss of moral control, sometimes to such an extent as to render the patient incapable of resisting temptation to the vicious habit; weakness, with pain or aching in the back; Indigestion, with oppression after food, Constipation, Flatulence, Palpitation, Headache, cold, damp hands, and moist skin; spots of Acne on the face; sunken eyes, paleness of the face, and loss of the healthy tints of the lips, the patient looking older than his years; stunted growth, the physical drain checking nutrition, and preventing in early life perfect bodily evolution; Paralysis; Impotence, etc. *Remorse* is often so keen and withering as to interpose the greatest barrier to success in the treatment. If indulgences in the habit were commenced early, and have been frequent and long-continued, the physical and mental injury is more serious and general, and no doubt sometimes leads to the deposit of Tubercle in the lungs. Happily, a course of judicious treatment is sufficient in nearly every case to effect a cure. In numerous instances, patients formerly under our care, and whose despondency was often almost extreme, have subsequently married, and been blessed with full domestic felicity.

Preventive Measures.—The sexual instinct in man is strong, and is the means provided by the Creator for the propagation of the race. But the *precocious* development of this passion may be prevented; and when, on account of youth and other circumstances, its gratification would be imprudent, it may be kept in abeyance by proper measures and correct discipline—the discipline leading to manliness of character, and at the same time better fitting the individual for the duties and enjoyments of mature manhood. From a somewhat lengthened experienced, we affirm that chastity tends to great moral energy of character, and contributes to a superiority and vigour of intellect which contrasts most favourably with the feebleness of the incontinent. Indeed, we find many patients of the latter class lack sufficient reso-

lution to employ the measures necessary to their restoration, thus rendering our task difficult and tedious. The following suggestions are offered in much confidence, and if faithfully adopted, will, in the majority of cases, suffice to prevent sexual vice.

1. *Good physical and mental training.*—The systematic adoption of physical and mental exercises expends the nervous energy, diverting it from the sexual organs, so that amorous thoughts and propensities become less prominent. The regular practice of gymnastic and athletic exercises, to an extent short of causing excessive fatigue, is of the first importance. Blood is thereby diverted from the internal organs to the muscles, and while the economy is occupied in repairing the wear-and-tear thus occasioned, semen will be but scantily, if at all, secreted. Daily physical exercise is essential as a healthy outlet for the large amount of animal spirits and stored-up energies existing in young men. In many cases, vigorous bodily exercise, which taxes the unused forces, is absolutely necessary—rowing, cricket, lawn tennis, riding, walking, etc. Much of the sexual vice of the present day is chargeable to the neglect of proper recreation, instruction, and amusement, by the young men of cities and towns in their leisure hours. Mental occupations also exercise a like tendency, though, perhaps, to a less degree. Constant and congenial occupation and recreation, bodily and mental, during the hours of relaxation, are indispensable. As just stated, the greatest danger arises during the hours of leisure, for if the mental and physical powers are not then employed, the mind is almost sure to be occupied with sexual thoughts. To a considerable extent, the habits we are considering have arisen from young persons having had no object of pursuit when the ordinary work of the day was concluded.

Besides preventing the formation of a vicious habit, constant and congenial physical and mental occupations are necessary in most cases to the maintenance of a strictly *continent* life, and we recommend them as infinitely preferable to occasional illicit sexual intercourse. We are sorry to find from the testimony of patients that some medical men recommend sexual intercourse to the unmarried. Viewed medically, we think

this most unwise, for such intercourse stimulates without satisfying the sexual passion, and at the same time exposes the individual to diseases of the most disgusting and baneful character. It is easier and safer to abstain entirely from sexual intercourse than it is to indulge occasionally. Total abstinence—not occasional illicit indulgence—is therefore the only safe course. Diligent subjugation of the will, the practice of regular and healthy exercises and gymnastics, suited to individual peculiarities, are sufficient to preserve continence. Fashionable and idle habits are the great cause of solitary vice on the one hand, or of venereal excesses and diseases on the other. The establishment of systematic exercises at home and in schools—athletic sports, gymnasia, etc.; libraries, literary and scientific institutions, including the instructive and interesting experiments in chemistry, electricity, mechanics, and other sciences; the study of botany, geology, etc.; all these are highly useful, for they preoccupy the mind, and so prevent loose thoughts and habits.

2. *Chaste thoughts and conversation.*—The cultivation of pure thoughts and conversation among the young would remove occasions of great temptation to sin. Parents, guardians, and teachers, should exercise a strict supervision over the books that are read. Much of the literature of the present day is of a character that tends to emasculate the mind of the reader, to crowd it with fancies and follies, incite it to passions, and pave the way directly to the evils under consideration.

3. *Avoidance of stimulants and luxurious habits.*—The too free use of meat, highly-seasoned dishes, coffee, wine, late suppers, etc., strongly tend to excite animal propensities, which directly predispose to vice. Probably most persons in health, enjoying ample means, eat and drink too much. Strict temperance, both in eating and drinking, is a great preventive. Soft beds and too much sleep are also to be avoided.

4. *Direct instruction and caution.*—Young persons who, there is reason to believe, are ignorant of the practice of self-abuse, should be kept so, but watched, and it may soon be observed if he or she be addicted to this vice.

When there are any symptoms, a careful examination should

be made, and the actions closely but unobtrusively watched. An examination of the linen generally affords conclusive evidence in the case of boys; the genital organs of these patients, it may be noticed, too, receive an undue share of their attention. If the practice be found to exist, its discontinuance must be made imperative, and the dangers pointed out that will inevitably follow a persistence in the habit. The delicacy of the subject must never be allowed to operate as a barrier to an important duty. The patient should be constantly watched during the day till he falls asleep at night, and be required to arise directly he wakes in the morning. In confirmed cases, the night-dress should be so arranged that the hands cannot touch the genital organs.

5. *Important precautions in the management of the young.*—Under no circumstances should nurses ever be permitted *unnecessarily to handle or expose the genital organs of children*, and children should be taught at the very earliest period that it is immodest, and even wrong, to handle the parts. *Flogging on the buttocks* should also be avoided, for it is calculated to excite precocious sexual sensations. The effect is of a reflex nature, and there is ample evidence that it tends strongly to excite the sexual instinct. *Climbing* is open to the same objection. Facts have repeatedly come under our notice which prove that sexual excitement is not infrequently engendered by these means. In schools, as well as at home, *every boy should have a separate bed.* The neglect of this important advice is a frequent cause of bad habits being taught and practised. In addition to a separate bed, he should be able to dress and *undress apart from the observation of others.* The necessary privacy may be secured by partitions placed between the beds, but not extending up to the ceiling, so as to interfere as little as possible with the ventilation. One of the few articles necessary in the sleeping-room is a *sponge-bath.* This, with a good-sized piece of honey-comb sponge, and a large towel or sheet, complete the outfit. The regular daily use of the sponge-bath, according to the suggestions given in Section 32, conduces greatly to the cure or prevention of Self-abuse.

If the habit have been acquired, and any of the effects

already stated developed, a proper course of treatment will usually suffice to restore the health, *providing the habit be relinquished.* Patients should be warned against all advertising quacks, and all advertised quack medicines. Hundreds of cases have come under our care with damaged health and exhausted resources, from falling into the hands of advertising quacks, who with their pamphlets haunt the streets of our leading towns.

TREATMENT.—This must be both medical and hygienic, and include all available methods for establishing the constitutional strength, soothing excitement, removing local causes of irritability, and forming healthy habits both of mind and body.

The *medical* treatment involves the administration of remedies only partially described in this Text-Book—*Agnus Cas., Bary.-Carb., Eryng., China, Canth., Phos., Plat., Ign., Ac.-Phos., Gels., Staph., Iris, Nux V., Sulph.*, etc., the selection and doses of which can only be determined by the local and general symptoms of individual cases. Other remedies are *Selenium, Dig., Nat.-Mur., Coni., Calc. Phos.* Amplitude of resources are pre-eminently necessary in the successful management of this affection. (See *Materia Medica.*)

Dr. A. E. Small, in his work on *Decline of Manhood,* says:—"If, as a result of self-abuse, there occur nocturnal emissions, causing a sense of debility and dulness, China 1x may be administered three times a day, before each meal, or until the sense of debility is removed, or Plantago Major 3x may be given the same way. When there is a feeling of malaise and confusion after excessive emissions, Phosphoric Acid 3x in five-drop doses, morning and evening, until the malaise and confusion are better. Selenium 3x may be given instead if there is Vertigo on rising in the morning. Sepia 6x to the 3x will cure excessive nocturnal emissions when they are followed by hypochondria, weak memory, sadness, depression of spirits, dulness of the head, and weakness of the sexual organs."

Although alone insufficient, the treatment by appropriately chosen drugs has often a marvellous power in speedily correcting the most distressing cases that come under our notice.

The *hygienic* treatment must be considered from a high standpoint, and include the commercial, social, and moral relationships of the patient—occupation, recreation, literary tastes, and mental and moral discipline; diet, sleep, bathing, etc. The circumstances of each patient should be diligently investigated, and the management strictly regulated accordingly.

CHAPTER XI.

Diseases of the Cutaneous System.

202.—Erythema (*Erythema*)—Inflammatory Redness of the Skin.

Definition.—Hyperæmia of the cutis, manifesting itself by superficial redness or blush of the skin, without swelling, or breach of continuity.

Varieties.—The varieties are named according to their characteristics. When it occurs on the surface of an œdematous swelling it is called *Erythema læve*. *E. fugax* is simply a fleeting patchy-redness. *E. marginatum* designates a redness with a well-defined circumference. *E. papulatum* consists of small red spots varying in size from a pin's head to a split-pea, raised after a time into a papular form, of a vivid colour, becoming pale on pressure, and dying away in a few days with slight desquamation. The spots may be aggregated or distinct, and are seen especially on the back of the hand, the arm, neck, and breast. The disease lasts about three weeks, and seems to be associated with rheumatic symptoms. It occurs mainly in young persons. *E. tuberculatum* is the same disease, in which the Erythema becomes somewhat tuberculated; it is often seen in servants who make a change of residence from country to town. *E. nodosum* is a more marked stage of the last; the spots are sometimes large as a walnut, or even much larger, oval in shape, the long diameter being in a majority of cases parallel to that of the

limb; they are generally seen on the front of the leg, rarely on the arm, or above the knee. This variety seems to be connected with adolescence (*Fox*).

Erythema, especially if chronic, is sometimes due to stomachic derangement, and is often a source of considerable discomfort. *Flushing of the face after meals* is a common erythematous symptom.

There is no marked itching; nor heat, tension, burning, or exudation, as in Erysipelas, for which it is sometimes mistaken.

Epitome of Treatment.—Bell. (*simple redness, and E. papulatum*); Acon. (*febrile disturbance, and flushing of the face from excitement*); Apis (*E. læve and E. nodosum*); Rhus 3x (*if vesicles form, and E. nodosum*); K.-Bich. (*E. papulatum, if* Bell. *be not sufficient*); Nux V. (*flushing after food*); Bry., Mang., Ferr., Ars., Ran.-Bulb., Mezer.

Accessory Measures.—Regular open-air exercise; sufficient time for, and freedom of the mind during meals; simple food; and the free use of cold water internally and externally. Where there is pain, as in *E. nodosum*, a compress moistened with Goulard-water relieves. Obstinate cases may require the local use of styptic colloid, or Faradisation.

203.—Intertrigo (*Intertrigo*)—Chafing—Soreness of Infants.

Definition.—Redness and chafing produced by the friction of two folds of skin, especially in fat children and adults: it is seen in the groin, axilla, and neck; sometimes a fluid is exuded, the acridity of which increases the local mischief, and presently an offensive raw surface is produced.

Intertrigo differs from Eczema in its acute course, and in the character of the secretion, which is clear, and does not stiffen linen.

Epitome of Treatment.—Cham. (*in infants*); Calc.-C. (*scrofulous children*); Lyc. (*obstinate cases*); Merc. (*rawness and great soreness*); Sulph. The parts should be *well washed with cold or tepid water, and carefully dried* two or three times

a day; a piece of linen, saturated with *Calendula-lotion*, may be laid between the opposed surfaces; or, in bad cases, a lotion composed of one part of tincture of *Hydrastis* to ten of *Glycerine* may be applied in the same manner.

Dusting the chafed parts with a fine powder consisting of equal parts of powdered *Lycopodium* seeds and *Oxide of Zinc*, or of *Fuller's earth*, is very useful.

204.—Roseola (*Roseola*)—Rose-rash—False Measles.

Definition.—A simple, non-contagious rash, of a *rose-red* or *pink* colour, occurring in patches, about half an inch in diameter, and associated with more or less febrile disturbance. There is also slight itching, sense of heat, and sometimes redness of the mucous surfaces of the palate and fauces.

Varieties.—*Roseola æstiva*—appearing in the summer-time only; *R. autumnalis*—in autumn; *R. symptomatic*—occurring during the course of other diseases; and *R. annulata*—distinct rings of redness, with an unaffected centre.

The disease is apt to occur in infants, when it comes and goes perhaps for several days, accompanied by local heat and itching, especially at night.

Roseola may at first be mistaken for *Measles* or *Scarlet fever*; but there are no catarrhal symptoms, as in *Measles*; and no sore throat or strawberry tongue, as in *Scarlatina*; there are also no "wheals," as in *Urticaria*.

Treatment.—*Acon.* is usually sufficient. A dose may be given every three or four hours several times. If the itching be very troublesome, the parts may be moistened with a lotion of one part of *Acon.* tincture to twenty of water. *Rhus* or *Bell.* may sometimes be required.

205.—Urticaria (*Urticaria*)—Nettle-rash.

Definition.—A transient, non-contagious affection of the skin, characterised by an eruption of prominent elastic patches or wheals, either redder or whiter than the natural skin, of

regular or irregular shape, with heat, tingling, and itching, more or less severe. Its sudden appearance, capricious removal and return, tingling sensation, the accompanying wheals, irritability of skin, and gastric disturbance, are *diagnostic* of the disorder. The wheals are probably produced by muscular spasm affecting limited portions of the skin.

Varieties.—Urticaria may be acute or chronic. Of *acute* cases there are two kinds:—*Urticaria febrilis*—marked by much febrile disturbance; and *U. conferta*—distinguished by the great number and frequent coalescence of the "wheals." *Chronic* Urticaria may be *U. evanida*—evanescent, without febrile symptoms, and with trifling redness; *U. perstans*—persistent Nettle rash; *U. subcutanea*—"subcutaneous Nettle-rash, a nervous affection of the limbs, accompanied at intervals with an eruption of Nettle-rash;" and *U. tuberculata*—characterised by the production of elevations of considerable size, extending deeply into the subcutaneous cellular tissue.

Symptoms.—Similar to, or more intense than, those produced by nettle-stings. The eruption consists of elevations, occurring in streaks or wheals of an irregular shape, on a red ground; the character of the rash becomes much more marked after scratching or rubbing, "so that it is possible, by using the nail of the finger, to write one's name on the skin;" it is generally worse in the evening, and when the body is exposed to cold air. There is much tingling and burning, and often the eruption, after disappearing suddenly from one part, shows itself in another. "In the Urticaria from irritant food—*Urticaria ab ingestis*—hyperæmia and burning heat are present in the most aggravated form." The spots contain no fluid, and do not end in desquamation. It is most common in spring and early summer, is not contagious, may occur at any age, and in the same person repeatedly.

Causes.—Derangements of the digestive organs, following the use of some particular kinds of food, among which we may specify bitter almonds, cucumbers, mushrooms, oatmeal; shell-fish, especially mussels;* and certain kinds of

* Indeed, so strong is the tendency in some persons to the development of Urticaria, that it is necessary to exclude shell-fish altogether from their diet.

medicines, such as *Cubebs, Copaiba, Valerian, etc.* Also mental depression, anxiety, defective innervation, and sometimes, according to Hebra, uterine irritation. The skin being extremely sensitive, it is easily excited by external irritants—such as the wearing of flannel next the skin (see Sec. 12), the bites of fleas, the stings of bees, etc.

Chronic, also intermittent, Urticaria is frequently associated with uterine or other diseases, and is often very obstinate. Cold, damp, rapid changes of temperature, and Dentition, favour its development in patients predisposed.

Epitome of Treatment.—

1. *Simple Urticaria.*—Apis, Urt.-U., Acon., Chlor.-Hyd.

2. *From gastric disorder.*—Ant.-C., Nux V., Puls.

3. *From cold.*—Acon. (*from draughts and cold winds*); Dulc. (*from damp*).

4. *Associated with other affections.*—Bry., Cimic., Rhus (*rheumatic patients*); Colch. (*gouty subjects*; Ars., Ipec. (*Asthma*); Puls., Hydras. (*uterine irregularities*).

5. *Chronic cases.*—Ars., Chin.-Sulph., Nat.-Mur. (*intermittent*); Apis, Sulph., Chlor.-Hyd.

6. *Special symptoms.*—Acon. (*febrile disturbance*); Chlor.-Hyd. (*appearing when warm in bed*); Bry. (*sudden retrocession*); Ign., Anac., Bovis. (*mental depression and confusion*); Coff. (*sleeplessness and nervous irritability*); Ver.-Vir. (*intense pain and tingling*). In the following preparation, it may be used locally with great benefit:—

℞ Ver.-Vir. ϕ, gtts. xx.
Aqua,
Spiritus V. R. } a a ℥ ss.

Rhus (*spots resembling flea-bites, purplish swelling, intense irritation, especially on the joints*). It may replace Ver.-Vir. in the above prescription.

Accessory Means.—A general *warm bath* is invaluable; it soothes the skin and promotes the cure. When the eruption is thoroughly out, the heat and irritation may be materially alleviated by smearing the whole surface of the body with fresh-cured bacon, or the parts may be rubbed with slices of lemon.

HYGIENE.—A dry, uniform, and moderate temperature; plain food; plenty of open-air exercise; great cleanliness. Draughts, changes of temperature, indigestible food, and all exciting causes, must be removed and avoided. If flannel be worn, it should be over a garment of a different material.

206.—Prurigo (*Prurigo*)—Itching of the Skin.

DEFINITION.—A chronic inflammation of the skin, characterised by an eruption of solid fleshy *papulæ*, *excessive itching*, and a thickened and *discoloured state* of the skin.

SYMPTOMS.—*Intense itching*, and creeping sensation; patients scratch and tear themselves until the blood flows; their sleep is frequently disturbed, and their existence is thus often rendered almost unendurable; or the impulse to incessant scratching is so powerful as to induce the patient to seek seclusion. Sometimes the itching is diffused irregularly over the surface; at other times it affects the extremities; frequently it occurs around the anus, or on the scrotum, or on the female genitals. It is often a horrible and most obstinate disease.

CAUSES.—The *predisposing* are—constitutional taint, senile decay, chronic disease, etc. It is generally a symptom of lowered vitality, or of decay of the skin; the skin loses its elasticity, firmness, and fat, and its secretion is disordered. It has been thought that the disease was caused by *pediculi*; but it is not so. Pediculi are only present in Prurigo in uncleanly persons. *Exciting* causes are—rich, indigestible food, stimulating drinks, neglect of cleanliness, extreme heat or cold, etc. In summer-time, a mild form sometimes attacks young persons.

TREATMENT.—*Aconitum.*—Furious itching all over the skin, *with febrile symptoms.*

Sulphur.—Severe itching, attended with thirst and *dryness of the skin*, worse in the *evening* and *in bed*. This is generally a prominent remedy, and it is frequently specific, especially in recent cases.

Arsenicum.—Itching with *burning;* or an eruption emitting

watery fluid like sweat, and attended with much constitutional *weakness*. It is most suitable in *chronic* cases.

Ignatia.—Itching of the skin, of a fine, pricking character, resembling flea-bites, and changing from one part to another.

Alumina (*dry skin, itching, worse when warm*); Morph. (*crawling sensation*); Rumex (*worse when exposed to cold*); Kreas. (*swelling and itching*).

Other remedies are sometimes required :—*Merc., Carbo Veg., Rhus, Mez., Apoc., Caust., Ac.-Sulph., Ac.-Nit., Pet., Sep., Collin., Apis., Cocc., Berb.*

Accessory Means.—The skin must be strengthened by wholesome and regular diet, frequent exercise in a bracing air, *daily ablutions with cold or tepid soft water*, shower-baths, etc. Without these measures, medicine will be of little permanent use. Stimulating food or drink, pastry, rich sauces, pickles, and indigestible food generally, must not be indulged in. The use of ointments is generally injurious. *Scratching must be avoided*. In severe cases, temporary relief may be obtained by bathing the parts with alcohol and water in equal proportions; or with *Mezereum lotion* (one part to ten of water); or by sponging the skin, on retiring to bed, with a warm infusion made by pouring boiling water on bran.

The Wet Compress.—Prurigo, if confined to one or two places, is much benefited by the constant use of a wet compress over the affected part; for although it often increases the irritation at first, it finally assists nature in expelling the morbid matter. (See Section 33.)

Scratching.—Notwithstanding the incentive to scratching in Prurigo and other skin affections, the practice greatly aids in keeping up the irritation and increasing the disease. On this point the following remarks by Dr. Tilbury Fox well express a condition we have often observed :—

"When the disease is *non-contagious*, secretion, if present, may be transferred (by scratching), and, when acrid, sets up local inflammation; and, when *contagious*, scratching is the surest method of inoculation, as in the case of the contagious Impetigo or Porrigo. Children in this way transplant the disease from the head to various other parts of the body. Mothers, beyond a doubt, get it about their hands from children."

207.—Lichen (*Lichen*).

Definition.—A non-contagious chronic disease of the skin, characterised by the appearance of small hard papules, about the size of millet-seeds, uniform, *flattened*, smooth and *shining* at the apex, dull crimson red, or of the same colour as the skin, closely grouped, but distinct from each other; never becoming vesicular or pustulous; there is itching, and the skin is generally dry and thickened. When disappearing, very fine, dry, greyish scales are formed.

The disease appears on different parts of the body, but generally on the front of the fore-arms and wrists, the flanks and hips, the lower part of the abdomen and knee.

Varieties.—*Lichen simplex*—occurring in summer; *L. pilaris*—the follicles of the hair being the seat of the affection; *L. circumspectus*—the pimples being grouped in small circular patches, with a well-defined border, sometimes with a clear centre; *L. agrius*—the most serious form of the disease, is seen in grocers, bakers, bricklayers, and washerwomen, sometimes called "bakers' itch;" the pimples are very close, red, and inflamed, contain a secretion, and are accompanied by intense itching and burning, febrile symptoms, pains in the limbs, gastric derangements, etc., lasting, in the acute stage, ten or fifteen days; or, *L. tropicus*—"prickly heat," which occurs chiefly in hot climates, attacking the parts covered by the clothes, and causes a peculiar tingling and pricking; the papillæ are of a vivid-red colour, about the size of a pin's head, but there is no redness of the skin generally: the disease sometimes occurs in this country.

Causes.—Constitutional predisposition; irregularities in habits or diet; certain occupations, as those of cooks, bakers, grocers, etc.; hot weather or climate.

Epitome of Treatment.—Sulph. (*simple*); Ant.-C. (*with digestive derangements*); Apis *or* Led.-Pal. (*"prickly heat"*); Ars. (*L. agrius: chronic cases*); Nux Jug., Sulph., Ars. Iod.

Accessory Treatment.—Simple, unstimulating food and drink; proper attention to the general health. The daily tepid or cold bath is both preventive and curative of "prickly heat." It is seldom seen on the face, neck, and hands of

persons who frequently wash those parts. See "Causes," and also "Accessory Measures," in the two previous Sections.

208.—Strophulus (*Strophulus*)—Red-gum—Tooth-rash.

Varieties.—Strophulus may be red or white. *Red Strophulus* (*red-gum*) begins as red blotches, each slightly elevated in the centre; the redness soon fades, and the central elevation enlarges and forms a flattened pimple. They occur on the face, neck, arms, and may even extend over the whole body. *White S.* consists of pearly white, opaque pimples, smaller than the preceding—about the size of a pin's head, usually on the face and arms.

Cause.—The appearance of Strophulus, as of Nettle-rash, on the body of an infant is certain evidence of *unsuitable diet*, and of derangement of the digestive functions. It is also most frequent in children who are kept too much in hot rooms, and excluded from the fresh air.

Treatment.—*Chamomilla.*—This remedy is generally the best, and is often sufficient. A dose thrice daily.

Ant.-Crud.—Associated with *Indigestion*, white tongue, etc. *Puls.* may also be required under like conditions.

Calc.-Carb.—With *chronic Acidity.*

Accessory Means.—The regulation of the diet; abundance of fresh air; clothing sufficient to protect the body from cold, and, at the same time, permit of the access of air to the skin; and daily use of the cold or (at first) the tepid bath. Favourable hygienic conditions are necessary in every case, or medicine will prove inefficient. An argument in favour of these measures may be adduced from the fact that, since they have been more generally adopted, and children kept less in artificially heated rooms, and more freely exposed to fresh air, cases of Strophulus and of Nettle-rash have become much less frequent. Local irritation from teething, acidity, etc., should be corrected.

209.—Pityriasis (*Pityriasis*)—Branny Tetter—Dandriff.

Definition.—A superficial cutaneous affection, in which there is desquamation—the skin falling off in whitish bran-like scales: also more or less redness, itching, and heat.

The disease may occur on the head (*Dandriff*), eyelids, or other parts of the body. The scales are continually shed and reproduced, but there is no discharge.

Treatment.—*Arsenicum* is generally homœopathic. A dose may be given thrice daily. *Graph.* or *Lyc.* may be substituted if *Ars.* be not sufficient. Other remedies are *Ac.-Fluor.*, *Mezer.*, and *Sep.*

Accessory Means.—Frequent baths, and hard rubbing after shampooing the scalp, checks the formation of Dandriff there. As an application, Glycerine-of-borax is often of great service. Perfumed *Carbolic Acid* makes one of the best hair washes, and its occasional use tends to prevent or cure Dandriff. Stimulating food should be avoided.

210.—Psoriasis (*Psoriasis*)—Lepra Vulgaris—Dry Tetter.

Definition.—A non-contagious cutaneous affection, characterised by well-formed, dry, and whitish scales, without vesiculation or pustulation, accompanied by cracking of the skin, and prone to recur.

The general health is not appreciably affected, there being few if any symptoms beyond slight itching, which is worst at the commencement.

The cutaneous eruption which has long been known as *Lepra* is now allowed to be merely a variety or a declining stage of Psoriasis, and not a separate affection (*Tanner*).

Varieties.—In the common form of Psoriasis there are whitish, minute spots, made up of dry, silvery-looking scales, heaped together on tawny-red patches of skin about the extensor aspects of the elbow and knee, and other places where the bones are near the surface (*P. vulgaris*); when the spots are larger, they resemble drops of mortar, and are found on

the breast, back, and limbs (*P. guttata*); then the eruption may be more developed, and extend over a larger surface, sometimes covering an entire limb (*P. diffusa*); when the eruption runs together in a serpentine form, the scales are thin, and quickly reproduced (*L. gyrata*); when the scales are large, dry, and adherent, and the patches thickened and cracked, a slight discharge may occur, causing scabs,—this is the chronic form (*L. inveterata*).

Psoriasis progresses by an increase in the size and number of the patches, and their extension along the extremities to the trunk. On the other hand, the cure of the disease is marked by diminution of the scales, and more full exposure of the surface beneath, until gradually the eruption disappears, leaving little or no trace of its former existence. It is sometimes, however, a most obstinate disease.

Causes.—Psoriasis occurs in persons apparently in good health, but who are probably suffering from some form of defective nutrition, induced by too rapid growth, bad living, over-study, anxiety, prolonged lactation, etc., especially where a disposition, often hereditary, exists. The frequent use of stale dried fish, and the want of fresh unboiled vegetables, are probably frequent causes.

Treatment.—Merc., Iod., Ac.-Nit., Iris, Sulph., Sep., Lyc., K.-Hydriod., Rhus, Mez., Ant. Tart., Graph., Cicuta; Petrol. (*obstinate cases; scaly patches with deep fissures*); Ac.-Carbol., Teuc., Ars. (*chronic and inveterate cases*). *Arsenic* is an excellent remedy, and may be given for two or three months in gradually increasing doses. Veterinarians give this drug freely to horses, and it causes great improvement in their coats.

Accessory Means.—*Local.*—Warm baths. Preparations of *Glycerine* (see Sec. 30) are very useful, if the skin be much cracked, or occasional poultices, if it be very hard. The application of the ointment of the *Iodide of Sulphur*, or Carbolic Acid and Oil (gtts. iij. oleum ʒ viij.), often proves most useful in Psoriasis. It should be preceded by a warm bath. *General.*—Nourishing diet, including frequent small quantities of unboiled vegetables; for growing persons, Cod-liver-oil (see Sec. 29), except when stale fish is the cause. Any defects in

the functions of digestion and assimilation should, if possible, be corrected. Patients who have been overtaxed in mind or body should have rest and change. The daily habit of *bathing or cold sponging* should be adopted, and will, to a large extent, prevent relapses. Warm or tepid soft water baths, with the use of *pure soap*, at bed-time, softens the scales, and promotes the healthy functions of the skin. Free *out-of-door-exercise* is also most useful, and favours the healthy action of the lungs, liver, and the whole of the digestive organs.

Dr. Shuldham says:—"When the *surface scaliness* has been softened and rubbed away with soap and water, an ointment with *tar* for its chief ingredient should be applied to the skin; the soaping and tarring to be followed up by one of *Unna's salicylic acid* and *kreosote plasters*."

211.—Herpes (*Herpes*)—Shingles—Tetter.

Definition.—*Large vesicles*, or small blebs, distinct from each other (not confluent as in Eczema), occurring in patches on different parts of the body, having an inflamed base, and containing fluid,—at first clear, then milky,—quickly disappearing by resorption, and ultimately shrivelling into light-brownish scabs.

Varieties.—There are four varieties:—*H. phlyctenodes*, sometimes called *Nirles*, commences with a sense of local heat and inflammation; upon this ground arise round grouped vesicles, from ten to twenty, in patches varying from the size of a sixpence to that of a five-shilling piece, of which there are several, surrounded by a red areola, and mostly occurring about the face, neck, and upper limbs. *H. Circinnatus, vesicular* (not the common) Ringworm—is disposed in rings; and *H. iris*—in the form of rainbows. *H. zoster* or *zona*, commonly called *Shingles* (from *cingulum*, a girdle), has the nature of the first variety, but derives its name from its manner of encircling one half of the body. It is an acute disease, lasts from fourteen to twenty days, follows the course of one or more of the cutaneous nerves, generally stopping short in the middle, though it may extend across to the other side, and has the appearance of a line of patches, like a belt, half

round the body. It generally affects the trunk, chiefly on the right side, but occasionally the face, shoulder, abdomen, or upper part of the thigh. Herpes frequently appears on the lips of persons suffering from Pneumonia, Intermittent Fever, Ephemera, and epidemic Cerebro-spinal Meningitis. It is most common in the young, particularly during change of weather, and is often preceded by neuralgic pains, the eruption following in the same locality. In some rare cases, Ulceration may supervene; there may be much pain, smarting, or burning; and the scars may remain for some time. Zona is much dreaded, and uninstructed nurses foolishly state that if the patches extend round the body, death is certain to result. There is, however, no danger, unless the patient be very old and feeble.

Pathology.—*H. zoster* is intimately connected with nervous disorder. Recent investigation shows that it is due to a disease of the ganglionic system, especially of the corresponding spinal ganglion, or the Casserian ganglion. "The disease presents in many of its features a family likeness to the Exanthemata. It has a definite duration; it is anteceded by general pyrexial symptoms; and it presents eruptive phenomena, which are not excessive, but go through stages of maturation and decline, as in the eruptive fevers."—*Fox.*

General Symptoms.—In addition to symptoms already mentioned, there is often a feeling of *malaise*—feverishness, Headache, shivering—and, perhaps, neuralgic pain in the side (*Pleurodynia*, see Section 99), which may be very acute, especially in Shingles. Erythematous patches make their appearance, covered with small white points, which rapidly enlarge into tense, clear, serous vesicles. In four or five days, the serum is partly absorbed, and the remainder is turbid and dark. The redness fades, encrustations form, and in about ten days they disappear, leaving dark red stains. The disease is mostly accompanied by sensations of heat, tension, and burning, felt even before the appearance of the eruption, and is followed by weakness and depression. When the disease occurs in the aged, or in persons of feeble constitution, there is much debility, and Ulceration may arise, further debilitatin the patient.

HERPES AND ECZEMA.—The points of difference between these diseases are slight, and the two eruptions often merge into each other; but the vesicles of Herpes are larger than those of Eczema, and do not tend to become confluent, each herpetic vesicle running its course distinctly and separately. On the other hand, Eczema often forms raw and moist crusts which discharge a gelatinous watery secretion.

CAUSE.—*Irritation of the Nerves*—as when Catarrh affects the air-passages, and Herpes is developed on the nose or lips; or during the course of other diseases.

EPITOME OF TREATMENT.—

1. *Earliest symptoms.*—Acon. (*with Neuralgia consequent on anxiety*, etc.).

2. *Developed Herpes.*—Rhus (*in all simple cases*); Sulph. (*to follow* Rhus *if necessary*); Ars. (*Neuralgia, and in debilitated constitutions*); Phyto., Mezer. or Graph. (*burning, insupportable pain; ulcerous conditions; and in old persons*); Merc. (*much itching, great tendency to suppuration*); Zinc. (*neuralgic pains after removal of eruption*); Phos. (*consumptive patients*); Tellur., Phos., Sep. (*Herpes circinnatus*).

3. *Pleurodynia.*—Ran.-Bulb. (See Section 99.)

4. *Additional remedies.*—Mang., Staph., Cist., Nat.-Mur., Pru., Spi., Canth., Comacladia. Dr. J. Compton Burnett prescribes *Aurum.*

ACCESSORY MEASURES.—The daily bath; plenty of out-of-door exercise; and the "Accessory Measures" suggested in Section 99. For local application, see "Glycerine" (Sec. 30); Canthar. lotion *also relieves.*

212.—Eczema (*Ekzema*)—Catarrhal Inflammation of the Skin—Scalled-Head—Milk-crust.

DEFINITION.—Eczema is essentially a Dermatitis or Catarrhal inflammation of the skin, characterised by more or less superficial *redness*, of small *closely-packed vesicles*, usually not larger than a pin's head, which run together, burst, and pour out a *serous fluid*, which dries into thin yellow *crusts.* The exuded fluid has the property, when dried, of stiffening linen,

which distinguishes it from other skin diseases. Pain, smarting, or itching are also present.

Eczema is one of the most common of all cuticular diseases, constituting one-third or more of all skin affections; it lasts a varying time, in consequence of successive local developments, and its tendency to spread. After its disappearance, no traces are left of the disease. Eczematous ulcer about the ankle, often occurring to elderly men, when warm in bed, causing great pain, is indicative of incomplete Gout.

Symptoms.—The most usual is a red surface with vesicles or fissures from which the serous fluid exudes. A great plane of interwoven capillaries renders the skin very vascular, and gives rise to the copious exudation. The deeper layers of cuticle, including that lining the sweat ducts, appear most implicated. The vesicles *appear in successive* crops, may prolong the disease for an indefinite time, and are attended with *itching* and local *heat*. The skin is irritable; occasionally excoriations or crackings of the part occur, and sometimes the parts around the patch inflame, probably from the irritating nature of the discharge. If no vesicles be apparent, the disease may be recognised by the skin feeling thick when raised by the finger and thumb, by the starchy nature of the discharge, the formation of thin yellow crusts, and the irritation. The most common seats of the patches are the scalp, behind the ears, the face, the fore-arms, and the legs, and its appearance differs greatly in each of these locations. If the disease be extensive, there may be considerable fever, a pallid appearance, Headache, loss of appetite, etc. The mucous surfaces may become the seat of Inflammation, either by the spread of the disease from the skin, or as a consequence of the general condition. The retrocession of Eczema may be followed by other diseases—Diarrhœa, Asthma, Bronchitis, or, in the female, Leucorrhœa.

Varieties.—The chief are *E. simplex*, in which the inflammation and irritation are moderate. This variety often results from exposure to the sun's rays; or it may be caused by irritants—heat, cold, bad soap, etc. If it occur in hot weather, the patient complains of fever, a "heated state of the blood," etc., and the eruption follows, appearing on the exposed parts

of the body—the face, neck, arms, back of the hands, etc.: this condition is commonly called "*heat-spots*." *E. rubrum* is a more highly inflammatory variety, the eruption being *very red* and shining, and there is much general disturbance: the *burning* is severe; brownish scabs are formed; and the parts usually affected are the *flexures* of the body—the inner side of the thigh, groin, elbow, wrist, etc.: it is apt to become chronic in old persons, and when it occurs about the legs is called "the weeping leg," and may lead to ulcers. It is often found on legs affected with Varicose Veins. *E. impetiginodes* is the variety which occurs in lymphatic and debilitated children, especially those who have a tendency to the formation of *pus;* the discharge is soon mixed with pus, which forms greenish-yellow thick scabs: it is commonly seen on the heads of infants (*Porrigo Capitis, Scalled-head*), and is a combination of Eczema and Impetigo. *E. chronicum* is a form common to any of the foregoing kinds of the disease; it often oscillates between cure and recurrence; and the skin becomes harsh, dry, red, and thickened. The most intractable cases are those in which Eczema is combined with the syphilitic or scrofulous constitution.

Eczematous patients are generally light-complexioned, pale, and ill-nourished; their skin is dry, and they possess but little subcutaneous fat. In short, mal-assimilation and defective innervation may generally be found to underlie the disorder.

Causes.—Eczema is sometimes hereditary, but probably depends mainly upon constitutional irritability, with faulty innervation. Thus, certain nerves of nutrition being inactive, that part of the system through which they ramify does not receive adequate nervous stimulus, and is attacked by the disease. Hence trivial exciting causes are sufficient to develop the disease—the action of the sun's rays, heat, cold, the use of cosmetics, paints and washes, stockings dyed with aniline, etc. In adults, it is a common sequel to over-work, anxiety, or irregular habits. The strapping of ulcerated legs with plaster, especially if there be Varices and an irritable constitution, is sometimes a cause. The rash developed by sulphur-baths, the rubbing in of croton-oil, and also that following hydropathic

treatment, is eczematous. Shoemakers who sit long with their thighs together, grocers and cooks whose hands and fore-arms come in contact with sugar, washerwomen who use soda and soap, bricklayers and builders who handle lime, are subject to Eczema. In infants it is often due to improper food, friction, and irritation of clothes wet with urine, impoverishment of the mother's milk, or want of attention to her general health, and very often to hereditary Syphilis. Its first site in infancy is usually the umbilicus. In children, *intestinal irritation* from overfeeding, too rich food, too varied meals, late suppers, and other improprieties, are frequent causes. It is perhaps impossible to overestimate the influence of improper diet in the production of Eczema.

Pathology.—Although it is to a great extent a disease of pure debility consequent on innutrition, there are instances of its occurrence which show that it is a lineal descendant and consequent of Cancer. The morbid anatomy of Eczema may be described, according to Dr. Tilbury Fox, as a swelling of the cells of the epidermis from imbibition of fluid, together with infiltration of serum into the substance of the corium and the rete, and the production of a large amount of cell-growth. The outpoured fluid finds its way to the *rete mucosum* from the capillary layer, separating the cell elements, and uplifting the cuticle so as to form vesicles. The capillaries are much congested. When the cuticle is ruptured, the deep layers of the *rete mucosum* or even the corium may be exposed. In some cases, the cells of the rete are intermingled with pus cells to a large extent. As the result of the inflammation, certain hypertrophic and degenerative changes may subsequently occur in the deeper parts of the skin.

Epitome of Treatment.—

1. *Earliest symptoms, and in Eczema simplex.*—Acon. in alternation with Rhus; Canth., Sulph.

2. *E. rubrum.*—Ant.-T.; Ars. in alternation with Bell.; Crot.-Tig. (*especially if there be sickness or painful Diarrhœa*); Ac.-Nit., Merc.-S., K.-Bich., and Hep.-S. (*patients of a syphilitic or scrofulous diathesis*); Calc.-C., Graph. (*soreness behind the ears*); Crot.-Tig. 2x or 3x may be applied externally, and often exerts a marked favourable action. But *local*

medication is chiefly required when the discharge from the ruptured vesicle is irritating to the surrounding skin: in other cases it is better omitted altogether. Rhus Tox. ϕ, or Carbolic Acid $\frac{1}{20}$, 20 drops to a pint of water, applied directly to the surface, may often be used with excellent results.

3. *E. impetiginodes and chronicum.*—K.-Bich., Crot.-Tig., Ars., Merc., Ant.-T., Lyc., Nat.-Mur. (with a lotion of common salt), Hep.-S., Calc.-C., Sil., Nux Jug., Viola Tric. (*Milk-crust* and *Porrigo Capitis*). When the scalp, or other hairy part, is affected, Carbolic-acid-ointment (ʒss to pure lard ℥j) neutralises the fœtor, and destroys pediculi. The hairs should be clipped short, and semi-purulent scabs removed by occasional *bran poultices*, and steeping for a short time with the water in which that material has been boiled. *Mashed turnip poultices* are also recommended. But crusts and scabs should never be forcibly or hastily removed.

4. *Eczema Ani.*—Ac.-Nit., Carb.-An., Sulph. or Ars. (*itching causing sleeplessness*); Merc.-præcip.-Rub., (*rhagades*); Caust.

5. *Eczema Umbilicule.*—Merc.-præcip.-Rubr., Alum.

6. *Eczema Pudendi.*—Dulc., Rhus, Ars., Calad.

7. *Eczema Scroti.*—Petrol., Aurum., Sulph., Croton Tig., Lyc.

8. *Eczema Manuum.*—Rhus, Graph., Sulph., Sep., Ars., Iod.

Leading Indications.—*Rhus Tox.*—Red areola around the eruption; much itching, worse at night. Uncomplicated cases of Eczema are curable in the great majority of instances by this remedy. Dr. S. P. Hedges cured 75 per cent. of a large number of patients (children) by the administration of *Rhus Tox.* or *Rhus Rad.*, in dilutions from 1x to 30. Cases that resisted this drug were cured by *Puls.*, *Merc.-S.*, and *Sulph.*

Sulphur.—Eczema itching violently, and having a tendency to spread, though situated chiefly on the head or vulva. By the use of this remedy, morning and night, for a week or two, in gradually higher dilutions, a return of the disease is almost certainly prevented. Dr. Hedges treated 250 cases of all grades of Eczema and Herpes in the Chicago Half-Orphan Asylum, and remarks:—"One result gained from the observation of these cases is, that in every instance of relapse within

four weeks from the disappearance of the eruption, there had been no *Sulphur* used either during or at the close of the treatment."—*United States Med. and Surg. Journal.*

Arsenicum.—Eruption dry, *scaly*, with *intense burning*, or discharging corrosive ichor on face and extremities; face waxy white, tongue white. In *chronic* Eczema, *Ars.* is of the greatest use.

Calcarea Carb.—Thick scales, with *yellow pus* beneath; stools chalky; nutrition defective.

Graphites.—Eruptions on the *chin* or behind the *ears*, *moist*, and falling off from time to time; brittleness of skin of the *hands*, chaps, eruptions on the fingers.

Lycopodium.—Eruption *fœtid*, and bleeding easily.

Viola Tric.—Thick incrustations, and profuse matting discharge.

Mercurius Sol.—Crusts on the face; *salivation*, enlarged glands, scorbutic gums.

Hepar S.—Eruptions chiefly on the scalp, moist, inclined to ulcerate, and exceedingly sensitive to touch.

Croton Tig.—Intolerable *itching* and *burning; vesicles* with a yellow plastic exudation and much burning. In a recent lecture, Professor E. Wilson defined Eczema as "an inflammation of the skin with a breach of its surface, and," he continued, "by rubbing in a drop of Croton-oil we have immediately developed a case of Eczema." It is especially suitable for Eczema on the face or genitals.

Ant.-Tart.—Impetigo. Vesicles surrounded with red areola, especially about the nose, ears, neck and shoulders. Rattling cough, nausea, and sleeplessness.

Aurum.—In old persons who have mercurial symptoms, a suicidal tendency, or constant desire to be out of doors.

Bovista.—Moist vesicular eruptions, with thick crusts about the mouth and nostrils, and flabbiness of the flesh.

Caladium Seg.—Burning rash on fore-arm, chest, and vulva, relieved by perspiration, and alternating with Asthma.

Dulcamara.—Vesicular eruption on face and extremities, oozing out of watery fluid, bleeding after scratching, worse in the cold, or in the evening.

Conium.—Eruption about face, arms, and *mons veneris*,

especially in the old, with *gluey* discharge forming *hard* crusts. *Sep., Thuja, Rhus Ven., Borax, Oleander, Ant. Crud., Cicuta* are also useful.

Dr. Shuldham says: "I have found a 4 per cent. *Cocaine* ointment of great service in soothing the irritation when the *skin is broken.*" He also advises a mixture of *boracic acid* and *starch* powder, to which a drop of *Calendula* (warm) has been added.

Local Applications.—

For intense irritation.

℞ Bismuth Nit. grs. xxx.
Adipis Vulg. ʒj. M.

Eczema of the nipples.

℞ Arn. ϕ gtt. v.
Aquæ ʒj. M.

vel. ℞ Argenti Nit. gr. j.
Aquæ Dest. ʒj. M.

Crusts and cracks behind the ears.

℞ Merc. præcip. rubri grs. ij.
Axungiæ ʒij. M.

Weeping Eczema with moderate inflammation.

℞ Carbolic Ac. guttæ xx.
Adipis Vulg. ad. ʒj. M.

Accessory Measures.—The parts should be kept clean by frequent gentle washing with *soft water* and *Potash Soap. General Baths* are of the greatest utility in Eczema, as in all other chronic skin disorders, for they stimulate the healthy surfaces to increased activity, and so compensate for the imperfect action of the diseased portions. The great vascularity of the skin, and its large daily secretions, prove how corrective the healthy play of its functions must be in cases of threatened mischief to the internal organs. Perhaps there is no hygienic habit inculcated in this Text-Book commensurate in value to the morning bath, taken in one of the forms and according to the principles enunciated in Sections 13 and 32. In ragged schools, where each child has been compelled to take a bath as he entered school, great cleanliness, wholesomeness of the air, and exemption from contagious skin diseases have been found to result. With such convictions of

its value, we are glad to know that bathing is being increasingly adopted by the intelligent and well-to-do classes, although it is still sadly neglected by the illiterate and the poor.

Pure soft water is an agent of great value, and in many cases the only remedy needed. Hard water is irritating, and when rain water cannot be obtained it may be softened by boiling and the addition of bran, oatmeal, flour, or other mucilaginous matters, which further abstract the lime salts. The washing should be done so as not to spread the irritating discharge over unaffected surfaces, and afterwards well dried by pressure with a soft cloth, not by rubbing; *Carbolic Soap*, or *Transparent Soap*, is recommended to be used in washing. *Crot.-Tig.*, 2 or 3 dec. dil., may be used as a direct application afterwards; often a single application will suffice, or at most two or three; Glycerine, or Glycerine and water (see Sec. 30), may then be used to allay irritation. *Cod-liver oil* is useful to soften and remove crusts and scabs. Soft-water compresses, especially in the earlier stages of the disease, are very useful. Varicose veins in the legs, and the consequent congestion, usually lead to Eczema, as well as other eruptions on the legs, and suggest the value of *elevation* as an element of treatment, and of the necessity of attending to the general health. Without the latter, local treatment is often unsuccessful. The clothes should not be allowed to rub the parts affected. The regulation of the *food* is an important item in the treatment of Eczema. Now that we enjoy a national system of *education*, we ought to have elementary instruction given in Physiology and general Hygiene. We can scarcely expect a considerable diminution of Eczema, or of disease in general, especially among children, until mothers know better how to feed them. The daily use of *vegetable food* is an important point in the diet, especially such as is eaten uncooked—lettuces, celery, watercresses, etc.; for vegetables contain potash salts, which are needed by the blood, but are abstracted in the process of boiling. *Cod-liver oil* as a supplemental article of diet is also particularly recommended.

213.—Impetigo (*Impetigo*).

Definition.—Impetigo, a common disease of infants, is a severe, somewhat contagious, purulent Inflammation of the skin, and has been described as *Pustular Eczema* by some writers.

Symptoms.—The disease is characterised by an eruption of small semicircular, flattened pustules, grouped in clusters, having a tendency to run together, forming thick and moist yellowish scabs or incrustations. It attacks the ear, nose, scalp, and face. In children, the eruption, with its yellow tenacious secretion, sometimes covers the face or head like a mask, the discharge matting the hair together into a sour-smelling mass, beneath which the surface is red and tender. It is this form of the disease to which the term *Crusta lactea* (milk-crust—*Porrigo larvalis*) is most correctly applied.

Causes.—Poor diet; strumous disease, and irritations of the skin; infection.

Treatment.—*Viola Tricolor* for simple Crusta lactea; *Cicuta, Calc. Mur., Ant.-T., K.-Bich., Ant.-C.*, or *Ars.* When the scabs get thick and hard, they should be softened with fresh butter, and then removed by means of poultices of bran or linseed-meal, and carbolic-acid-ointment should be smeared over the part for a week afterwards. For washing, warm *rain* water should be used, to which a few drops of *Sanitas* may be added. *Ung. Hydrarg.-Nit. Dil.* is an excellent local application. (See also the preceding Section on "Eczema.")

214.—Acne (*Acne*)—Pimples.

Definition.—A chronic Inflammation of the sebaceous glands and hair follicles, occasioned by retention of sebaceous matter, and characterised by an eruption of hard, conical, and isolated papules, nodules, and pustules of various degrees of redness. An eruption is very frequent in tar factories, and is known as *tar acne.*

Pathology.—It is the most frequent skin disease resulting from Cancer, and has been mistaken for Small-pox.

Names and Varieties.—The word "acne" (which in all probability was written in error for *acme*) was intended to signify the occurrence of the disease at the *acme* of man's development—puberty, when, indeed, the simple form is most common. In *A. punctata* there is simply a collection of sebaceous or suety matter, in the form of a pointed eruption: this collection, when squeezed out of the skin, is emitted in a cylindrical form, having the appearance of a small grub or maggot (*comedones*), hence it is sometimes called "maggot-pimple," or "whelk;" it is most frequent in young females. *A. indurata*—sometimes called "stone-pock"—describes the disease when it is chronic and indolent, and when the pimples are become *hard*, with a dusky-red base; they are often painful, and produce a sensation of tightness about the face, the skin being congested and thickened. *A. rosacea* is seldom seen in young persons, but sometimes occurs in women in whom the catamenial function is imperfect; the redness is bright, there being much congestion; the veins are varicose, the face is much disfigured, the surface is red and dotted over with pustules, the skin is thickened, and food and stimulants produce great burning and flushing of the face. Alcohol, by flushing the face, causes what are termed "rosy-drop," "grog-blossom," etc., which are spots of Acne. "The physiognomy of the disease," writes Professor Wilson, "is made familiar to our minds by the words of Shakspere, when he tells us with regard to Falstaff, that

> 'His face is all bubukles, and welks, and knobs, and flames of fire.'

In a few words, the rosy spot may be said to be a *protest* of the fifth pair of nerves against ill-treatment received by the gastric portion of the eighth."

It must, however, be remembered that the disease is not necessarily connected with frequent alcoholic stimulation, since it sometimes occurs in the abstemious. *A. strophulosa* (*Strophulus albidus*)—"white Gum-rash"—consists of small *white* pimples, chiefly about the face, neck, and arms (see p. 718).

Occasionally, in uncleanly persons, an *acarus* is discovered in the sebaceous follicles, called the *Demodex folliculorum*.

CAUSES.—Congestion of the sebaceous follicles. This condition may be induced by various internal and external agencies; by the stomach, which has a great reflex action on the face, as seen in flushings after food, etc.; by enervation, intemperance, Constipation; physiological changes (as puberty); menstrual irregularities, and sexual abuse by young men; cold; the use of cosmetics; neglect of cleanliness, etc. It is of most frequent occurrence in the spring season, and then often returns for several successive years. Lymphatic patients, and those of a phthisical tendency, are most prone to Acne.

EPITOME OF TREATMENT.—

1. *Acne punctata in young persons.*—Bell. (*bright-red pimples; and in plethoric persons, with scarlet flushings*); Puls. (*females with usually cold, pale face, menstrual irregularities*); Ac. Phos. (*weakly persons*); Bary.-C. (*maggot-pimple*); Borax; Carb. V. (*simple, recent*).

2. *A. indurata.*—Sulph.; Calc.-C. (*with chronic acid Dyspepsia*); Arn., Ant.-C., Coni., Clem. *Iodine* is homœopathic to this variety. Hebra states that many persons, if they take *Iodine* internally, are affected with an outbreak of numerous papules of Acne on the face, chest, and back, which in some cases quickly change to pustules, in others remain for a time unaltered. They often prevent perseverance in the administration of a medicine otherwise indicated, and quickly disappear on its discontinuance without leaving a scar behind. *Bromide of Potassium* has great power over this affection, and the medical journals report cases in which long-continued Acne has entirely disappeared while this drug was being taken for other diseases. On the other hand, twenty-five-grain doses, thrice daily, have been known to develop an eruption of Acne.

3. *A. rosacea.*—Ant.-C., Rhus, Nux Jug., Carbo An., Juglans C.; Opi. (*dusky-red, bloated appearance*); Nux V. (*Dyspepsia, Constipation*, etc.); Ars. (*chronic or severe cases, with debility*); Agar. The last four remedies are also well adapted to the condition when produced by alcoholic toxication.

4. *A. strophulosa.*—Ant.-C., Calc.-C., Hep.-S.

5. *A. syphilitica.*—Ac.-Nit., Merc.-S.

Bellis, Ars. Iod., Ac.-Sulph. are also useful.

Accessory Means.—Hygienic measures and the correction of faulty habits are of the first importance in chronic Acne. Indigestion, menstrual derangement, debility, or any other constitutional or local affection associated with Acne, should be corrected.

The *diet* should be simple and nourishing, and uncooked vegetables and fruits freely eaten. Daily out-of-door exercise is favourable to the cure. *Soft-water* baths are of great value in this affection, although on first commencing them they seem to aggravate the disease. In addition to the morning general cold-bath, the parts should be frequently washed or douched with *hot water*. Acne *punctata*, writes Ringer, is efficiently treated by washing the face or other parts affected, with hot water and plenty of soap several times a day. The orifices of the sebaceous follicles are kept open, and the accumulation of superabundant secretion prevented. If by this treatment the skin becomes rough, red, and painful, it should be well rubbed with Glycerine of starch after each washing. All cosmetics, paints, etc., must be avoided. Vigorously brushing the nodules with a tooth-brush and soft-soap is said to be exceedingly efficacious.

A lotion (one part to twenty of water) of one of the following drugs, according to the indications, often relieves irritation and hastens the cure: *Bor.*, *Sulph.*, *Agar.*, *Rumex*, or the dilute *Ac.-Phosphoric.*

215.—Sycosis (*Sycosis*)—Mentagra—Barber's Itch—Chin-whelk.

Definition.—Inflammation of the hair-follicles of the beard and whiskers not associated with Syphilis. It may also occur in other hairy parts of the body.

It is a kind of "Acne of the beard." The name *Sycosis*—fig-like—was given to the disease from its supposed resemblance, when fully developed, to the inside of a fig.

Tinea Sycosis.—In some cases (especially in France) a parasite is discovered, which may be either the *Microsporon*

mentagrophytes, or the *Demodex folliculorum*. Dr. Fox and others hold that Sycosis is altogether a parasitic disease, and hence call it *Tinea Sycosis*. In this species of Sycosis, there are no crusts, and the hairs are rendered tender and loose, and may be removed without pain; while in the common form there is much pain in removing the hairs by the roots.

Sycosis is transmissible by contagion, from the use of a razor previously employed in shaving an affected person. Bad cases of *Sycosis Contagiosum* have been recorded from the use of razors that had immediately before been used in shaving persons with "bad chins." This method of transmission has been often noticed, and we call attention to it to suggest the preventive means, viz., the immersion of the razor in hot water, and wiping it before use.

Symptoms.—It is a disease of adult life: it commences insidiously, a red itchy patch being first noticed, which, after rubbing or scratching, and the lapse of a little time, becomes much more troublesome, as the follicles enlarge and pustulate; there is considerable sensation of burning, and shaving is very painful. Successive crops of pustules appear, often grouped together, the fluid exuded becoming dry and forming into crusts. Much discomfort, and sometimes disfigurement, is the result. The disease is very apt to become chronic, recurring at certain seasons.

Treatment.—The disease is often very obstinate. The remedy which has been found most curative is *Ant.-T.*, used internally and externally. *Lyc.*, *Calc. C.*, *Hep.-S.* and *Ant.-C.* have been suggested; but we have found no benefit from the latter. As an external application, the following preparation is recommended: *Ant.-T.* gr.ss., *warm* water ʒss; when the Antimony is fully dissolved, add Glycerine ʒss; and, *after washing and well drying*, apply to the affected parts twice or thrice daily. In our practice we have not found *epilation* necessary. The general health should be improved.

Should the disease resist this treatment, the existence of a parasite may be inferred, and *Sulphurous Acid*, or dilute *Carbolic Acid*, should be applied locally, by means of a spray-producer, several times a day, for a short time.

216.—Lentigo (*Lentigo*)—Freckles.

Definition.—Small, round, yellow, bran-like discolorations of the skin, seated in the *rete mucosum*, and occurring generally in young persons of a light complexion, and with red or auburn hair.

They appear in all parts of the body, whether exposed or not; and are independent of changes in the seasons.

They are not attended with itching, inflammation, or desquamation.

Dr. Gee considers that their prevalence among the children of the London poor affords marked evidence of the existence of a tubercular tendency.

Treatment.—The local application of powdered *nitre*, moistened with water, morning and night, will soon remove them. Iodine and other weak, stimulating lotions are also recommended.

217.—Chilblain (*Pernio*)—Chaps.

Definition.—The chilblain is a low kind of Inflammation of the skin, generally affecting the hands or feet, attended with itching, tingling, burning, swelling, and sometimes Ulceration. When it first appears it is a form of Erythema; when it breaks, it becomes vesicated; and when it is frost-bitten, it is gangrenous.

Chapped Hands.—This affection consists of slight inflammation of the skin of the back of the hands, which becomes cracked or "chapped." It occurs in frosty weather, when it sometimes gives rise to much inconvenience and pain. It requires similar external treatment to *Chilblains*.

Causes.—Exposure to cold, damp, or to sudden changes of temperature; warming the hands and feet by the fire when cold or damp. Delicate persons, with a constitutional predisposition to skin-diseases, are chiefly affected.

Epitome of Treatment.—

1.—*Simple Chilblains.*—Arn.; Tamus Communis ϕ as a paint; Bell. (*bright-red, shining, swelling, and pulsative pains*); Puls. (*blue-red appearance, pricking-burning pains, worse*

towards evening); Rhus, Canth. (*Inflamed Chilblains, with excessive itching*); Sulph. (*great itching, increased by warmth; obstinate cases; and to remove the predisposition*); Ver.-Vir. internally and as a lotion.

2. *Broken or cracked chilblains.*—Petrol. (*general unhealthy state of the skin, with a tendency to fester*); Calc. C., Bell., Agar., Rhus.

3. *Ulcerated.*—Ars. (*burning pains*); Phos. (*fœtid discharge, and when occurring in unhealthy subjects*); Petrol., Kreas., Ac.-Nit., Hep.-S.

4. *Frost-bite.*—The parts should be well rubbed with snow, afterwards with cold water, in a room without a fire, to prevent too sudden reaction.

Local and General Treatment.—All the remedies prescribed may be used both internally—in the dilutions marked in Sec. 24—and externally—in strong tincture or a low dilution, according to the power of the drug, either in the form of lotion or cerate. *Arnica* lotion or cerate should never be used for *broken* Chilblains, but *Calendula* may be substituted. *Tamus Communis*, externally applied, in the case of *unbroken* Chilblains, is an almost infallible cure. *Cajeput Oil* may be freely rubbed in night and morning, or oftener, if the irritation be great, with the happiest result. *Glycerine*, *Glycerine of starch*, or one part of *Glycerine*, mixed with two parts of *Eau-de-Cologne*, forms an excellent remedy for Chilblains, Chapped-hands, *fissures* or *cracks*. It removes the stinging, burning sensations, and makes the parts soft and supple. When undiluted Glycerine is applied to a delicate skin, it is apt to produce a burning sensation. A good wash for the hands when affected with chilblains is *Sulphurous Acid* three parts, *Glycerine* one part, and water one part. Ulcerated Chilblains require a poultice, or other mild application, until relieved. The soreness of Chilblains and Chapped-hands may be removed or mitigated by applying soft linen rags squeezed out of cold water, and then covered with oiled silk. This compress should be applied on going to bed; it equalises the temperature of the part, improves the nutrition of the skin, and diminishes the tendency to the re-formation of Chilblains.

Electricity.—In a chronic and severe case of Chilblain, Dr. Leach applied secondary currents of electricity; and, from the satisfactory results, was convinced that the usually fleeting nature of the tone imparted by this agent might be obviated, and a permanent cure effected by regular applications for a certain time daily, or on alternate days, etc., according to circumstances.

Extremes of temperature are to be avoided; also cold stone floors, suddenly approaching the fire after coming in from the cold, warming the feet on the fender, or the hands close to the fire, etc.

As Chilblains generally occur in persons whose circulation is defective, plenty of exercise in the open air, the free use of the skipping-rope, and wholesome nutritious diet, are necessary to prevent their recurrence. Pork, veal, salted meats, and all irritating or indigestible articles of food, should be excluded from the dietary.

218.—Ulcer (*Ulcus*).

Definition.—A breach of any part of the cutaneous or mucous surface, caused by the stripping off of its proper cuticle or epithelium, or by the destruction of its substance by disease or injury. *Ulceration* is the progressive softening and disintegration of successive layers of the ulcerating tissue, and is attended with a secretion of pus, or other kind of discharge. When only the epidermis or epithelium is removed, and the subcutaneous or sub-mucous tissue remains, the sore is called an abrasion or excoriation.

Varieties.—The *healing Ulcer* is that in which the granulating process goes on uninterruptedly to reparation; the *inflamed Ulcer* is hot and painful, with a red, bleeding surface, and a thin ichorous discharge; the *indolent Ulcer* is marked by an imperfect form of organisation, so as to be incapable of healing; the *fistulous Ulcer* consists of a narrow channel, with a false mucous membrane, produced by Abscesses which have not healed from the bottom; the *spreading Ulcer* is that in which the destructive process which formed it,

still existing, causes it to extend; the *varicose Ulcer*, which generally forms on the lower extremities, is the consequence of a varicose condition of those parts. There are also other varieties.

Causes.—A bruise, or burn; constitutional derangement from inflammation, improper food, etc.; or Ulcers may be openings by which nature rids the system of products, which, retained, would produce serious disturbances. "The constitutions most liable to ulceration are those which are debilitated by intemperance or privations, tainted with Syphilis or Scrofula, or broken down by the excessive use of *Mercury*, or in which the blood is impure from inaction of the liver, skin, and kidneys. The parts most disposed to it are those in which circulation is most languid, such as the lower extremities. On this account, tall persons are more frequently affected with Ulcers than short." Ulcers over the subcutaneous surface of the tibia are more difficult to heal than similar ones situated over the fleshy parts of the leg.

Treatment.—Strictly constitutional treatment is generally necessary. This may be illustrated by the fact that the appearance presented by a sore often furnishes an excellent test of a patient's health; a weak or indolent Ulcer rapidly assumes a healthy aspect on any improvement of the constitutional powers of the patient; on the other hand, a healthy sore immediately becomes indolent, or sloughs, when any extremely depressing cause comes into operation.

Silicea.—Simple Ulcer; slow, torpid suppuration; ulceration of the skin covering the shin-bone; scrofulous ulcers; and in *chronic* cases.

Belladonna.—Painful Ulcer, with surrounding redness.

Hydrastis Canadensis.—Unhealthy Ulcers; Ulcerations of mucous surfaces—the mouth, throat, nose, eyes, etc. It should be administered internally and applied locally in the form of a wash, lotion, or gargle, as the case may require.

Kali Bich.—Ulcer on the leg, deep, with hard base and overhanging edges. This remedy may also be used externally (gr. j. ad aq. ʒvj).

Arsenicum.—Inflamed Ulcers with burning pain, raw surface, or presenting a livid appearance, and easily dis-

charging blood or thin fœtid matter, and often with indifferent general health. This remedy is specially valuable in *indolent Ulcers* of the legs, and should also be used in the form of a lotion.

Rhus has proved an effective agent, used internally and externally; *Polygonum* and *Ammon.-Mur.* have cured superficial Ulcers and Sores on the lower extremities.

Hep.-S., *Calc.-C.*, or *Sulph.*—For constitutional Ulcers, and to improve the health. Also *Ferr.-Mur.* (as a paint).

Other remedies are:—*Lach.*, *Comocl.*, *Crot.-T.*, *Carb.-V.*, *Nit.-Ac.*, and *Merc.-S.*

Local Treatment.—The Ulcer may be cleansed with dilute *Carbolic Acid*, and covered with a little soft linen or lint, wetted with cold or tepid water, as is most agreeable to the patient, covered with oiled silk, and lightly bound over with a bandage. Sometimes it will be desirable to use *Calendula lotion* (thirty drops of the tincture to a teacupful of water), or some other soothing application; but in the majority of cases the simple water-dressing is sufficient. *Chloral Hydrate* has proved most beneficial; four grains in an ounce of water: the smarting soon subsides. In addition to the above treatment, bandages are more or less necessary in all Ulcers on the legs, unless absolute rest, with the elevation of the foot above the level of the hips, can be enforced. Laced stockings, or elastic stockings, are convenient substitutes for the bandage, and are more easily applied. The frequency with which the dressings should be changed depends on the amount of the discharge. If that is considerable they should be changed every day; otherwise three or four times a week will suffice. In the treatment of Ulcers on the leg, as, indeed, on every other part, undeviating *cleanliness* is essential. The uncleanly habits of many persons, who allow their feet and legs to remain unwashed for weeks together, induces an imperfect vitality of the skin, which favours the formation of Ulcers, and renders them disagreeable and obstinate in their results. Washing the lower extremities daily is one of the most potent means of preventing and curing the disease, and restoring the lost vitality of the parts.

As much open-air exercise should be taken daily as is con-

sistent with the patient's strength; but he should not stand much, nor sit with his legs hanging down; indeed, recumbent rest greatly facilitates recovery.

219.—Boil (*Furunculus*).

Definition.—A small, hard, conical, painful Tumour, involving the under surface of the true skin and the subcutaneous areolar tissue, which suppurates imperfectly, and contains a central slough or core, arising from deposit of unhealthy lymph in the part.

Symptoms.—A small, tense, inflamed and painful swelling, the size of a split-pea; this hardens, and the red blush around its base changes to purple. In a few days the swelling enlarges, owing to the formation of pus, and the pain becomes throbbing; the tumour bursts, and the core is discharged.

Blind-boils do not suppurate, but slowly subside. Boils often appear in crops, or as soon as one has healed another appears. They generally occur in the thick skin of the neck, back, nates, or arms, especially in the young.

Causes.—A disordered condition of the blood, from unwholesome food, or some unknown atmospheric causes, or depressing influences generally.

Treatment.—*Belladonna.*—Painful, hot, shining erysipelatous swelling, with *Inflammation* round the base. Dr. Hughes states that a boil in the stage of inflammatory engorgement, before matter has formed, may almost always be blighted by repeated doses of *Bell.* (1x). Dr. Simon says the inunction first of a few drops of *Tincture of Camphor*, then of olive-oil, is equally abortive. Later still, states Dr. Madden, its progress may be arrested by *Sil.* (3x trit.).

Hepar Sulphuris.—To facilitate the *suppurative process*, and, to a great extent, prevent its subsequent extension.

Silicea.—Indolent and *chronic* Boils.

Phytolacca.—After fevers.

Ac.-Nit.—In some *debilitated* persons, this remedy is required; it is very valuable in wounds which *fester*, and when

fungoid excrescences form. An aqueous dilution may also be applied topically.

Sulphur, morning and night for eight or ten days, to prevent a recurrence. Dr. Hughes states that if Boils recur again and again, the constitutional tendency may be checked by a course of *Sulph.*, and that he finds no need for any other medicines for Boils than *Bell.* and *Sulph.*

General Treatment.—As soon as the swelling points, indicating suppuration, a poultice, covered with oil-silk, should be applied and renewed frequently, until suppuration is completed. In the early stage, a cold compress should be used. When boils are of an acute variety, and the skin covering them is very thick, a free incision will facilitate the cure, and prevent the scar that would otherwise result. For treatment of *proud-flesh*, see *Ac.-Nit.* above.

In order further to prevent a recurrence of Boils, attention must be directed to the constitutional causes in which they originate. If, as is often the case, they arise from digestive derangement, abstinence from rich gravies, pastry, sweetmeats, etc., is imperatively necessary. Correct diet, cleanliness, and healthy open-air exercise and recreation, will do much towards eradicating a predisposition to Boils and other affections of the skin.

220.—Carbuncle (*Carbunculus*)—Anthrax.

Definition.—A malignant Boil, marked by a circumscribed Inflammation of the subcutaneous cellular tissue, of a flat circular shape, varying in size from one to six inches in diameter, or even larger; it is of a dusky-red hue; hard, very tender, and painful. It generally occurs on the posterior portions of the neck or back, where vitality is less active.

Symptoms.—It first appears as a hot, hard swelling, harder than a Boil, accompanied by a burning, dull, throbbing sensation. As the red swelling gradually increases, the skin covering it assumes a purple or brownish-red tint, and, in a few days, softens, suppuration taking place at *several points*. The matter is thin, watery, and scantily discharged; but if pressure be applied, a thick glutinous fluid may be squeezed

out. It is generally attended by considerable constitutional disturbance and depression; if large, and especially if seated on the head, there is violent fever, Delirium, and great and even fatal prostration may result.

Diagnosis.—Carbuncle differs from a Boil in its greater size; its broad, flat shape; in usually appearing singly; in giving way and discharging granular slough from *several openings;* in the dusky redness of the inflamed integument; and in the great constitutional disturbance and irritation which accompany it.

Causes.—A disordered condition of the blood, usually met with in a *debilitated* state of the constitution, as the result of chronic, exhausting diseases, or severe, acute maladies, or the habitual use of intoxicating drinks; great alteration in habits or diet; long-continued fatigue, etc. In the Cholera year of 1854 there were in England nearly 400 deaths from Carbuncle. Unlike Boils, Carbuncle is rare in young persons, being usually met with in debilitated persons who have passed the middle period of life; and more frequently in males than in females. Diabetes is frequently complicated with Carbuncle.

Treatment.—The chief remedies are—*Ars.*, *Bell.*, *Apis*, *Hep.-S.*, *Acon.*, *Sil.*, *Carbo Veg.*, *Lach.*, *Sulph.*, *Arn.*

Leading Indications.—

Aconitum.—Severe inflammation and *fever.* *Acon.* may precede, follow, or be alternated with any other remedy.

Arsenicum.—Large, painful, malignant Carbuncle, with great constitutional *prostration.* Often the best remedy.

Lachesis.—Low, inflammatory type of the disease, with evidences of the poison of the tumour extending to the blood; cerebral symptoms.

Apis.—Continuous *extension* of the erysipelatoid Inflammation.

Silicea.—To promote healthy *granulations*, etc.

Local Treatment.—Early fomentations, followed by a linseed or bread-and-milk poultice, will mitigate pain by relieving tension, and hasten the cure. In many cases, the simple cold-water compress is the best local application. Raw *tomatoes* are said to be an excellent remedy for soothing pain

and promoting suppuration. *Carbolic Acid* and *Glycerine* arrest decay, and cleanse away impurities, after suppuration has been established. The late Dr. Dalzell employed a local application and *Muriate of Lime*. Dr. Clarke recommends a lotion of *Liquor Calc. Chlor.* (1x a drachm to the ounce); also *Boracic Ac.* ointment. In some cases, incisions are necessary; but in the absence of great tension, severe pain, or extension of the Inflammation, the care of these tumours may be safely confided to nature, attention being directed to such constitutional treatment and soothing applications as each particular care may require.

If there be any signs of putrescence, a yeast poultice should be applied, and sprinkled over with a powder of the 1x trituration of *Carbo Vegetabilis*, or of crude powdered charcoal. (See Sec. 34.) This should be renewed every six hours, till the parts assume a more healthy appearance.

A method of treatment by *Strapping* has been adopted with great success, and is a far safer and more rapid plan than by incision or cauterisation. The sides of the Carbuncle are drawn together by *tightly*-applied broad strips of strapping-plaster; the plaster should be removed daily, and any discharge that may have exuded sponged away with warm water. The enlargement of a Carbuncle may be considerably curtailed by early strapping.

Diet.—The diet should be nourishing, and include Essence-of-Beef, Cod-liver-oil, etc. In debilitated cases, the brandy-and-egg or milk-and-egg mixture generally does good. But, in many cases, alcoholic drinks are best avoided.

221.—Whitlow (*Paronychia*)—Felon—Gathered Finger.

Definition.—A painful Inflammatory swelling at the end of a finger or thumb, having tendency to suppurate, and, in debilitated constitutions, to recur.

Varieties.—The *cutaneous* Whitlow is an Inflammation of the surface of the skin, with burning pain, and effusion of a serous or bloody fluid, which raises the cuticle into a bladder. The *subcutaneous* is attended with great pain and throbbing,

and suppuration under the skin at the root of the nail, which often comes off. *Tendinous* Whitlow, or *Thecal Abscess*, is inflammation of the *tendinous sheath* of the finger. When Whitlow is malignant, pressing on to the periosteum, it is sometimes called *Felon*.

Causes.—Cutting the nail to the quick; a bruise, burn, or other mechanical injury; the introduction of poisonous or acrid matter into scratches on the finger; constitutional disorder.

Symptoms.—Heat, pain, throbbing, and redness at the end of the finger; as the symptoms increase, there is swelling, tension, and pain extending up the arm; the surface becomes livid, and shortly assumes a pale, cloudy appearance. If suppuration occur, a dirty-looking fluid is discharged; subsequently the nail falls off; and if the finger be kept at rest, and the health be not very defective, a new nail is produced, and the finger is well. But under unfavourable conditions, the part may ulcerate, the finger inflame, the bone become diseased and phlegmonous Inflammation attack the arm.

Treatment.—As soon as the first indications of Whitlow are noticed, the finger should be repeatedly plunged into water as hot as can be borne, in which common salt has been dissolved for two hours, or even longer; the hand held in a raised posture, and a dose of *Silicea* taken every three hours. Thus its formation may often be prevented. Exposing an incipient Whitlow to the fumes of strong *Nitric Acid* also tends to disperse it. If these means be commenced too late, a warm bread-and-milk poultice should be applied, and *Sil.* continued every four hours, in alternation with *Acon.* when there is much feverishness, or *Bell.* when the inflammation is erysipelatous. *Merc.*, *Hep.-S.*, and *Ac.-Fluor.* are also good remedies.

Dr. Douglas applies lemon juice. If the Whitlow be at the end of the finger, he cuts off a small portion of the lemon, then breaking down the pulp, inserts the finger in the lemon. Painting the finger with *Phos.* 3x has also been found of service.

Accessory Means.—Hot fomentations to relieve pain. If

inflammatory action persist, the finger becoming hard, and there be no signs of early suppuration, a free incision should be made to relieve tension and prevent sloughing, and, possibly, disease of the bone. In opening Thecal Abscesses the incision should be made strictly in the middle line, to avoid the digital arteries which run along the sides of the fingers. The opening should also be made *between*, but not over, the joints. *Calendula* lotion should afterwards be applied.

Onychia is Inflammation of the nail-matrix (*the substance from which the nails grow*); it may be induced by similar causes to those of Whitlow, and especially by an ingrowing nail, or cutting the nail down to the quick. *In-growing of the nail* (*Unguis involutus*) may be remedied by softening it in warm water, then paring it thin on the upper surface, and cutting it down as far as may be at the middle part of the extremity, avoiding cutting the parts which tend to grow in. By these means the growth is diverted from the sides; since a nail will grow most where it is cut most. The daily application of a solution of *Ferr.-Perchlor.* alone, both relieves and cures.

222.—Corn (*Clavus*).

Definition.—A small thickened mass of epidermis accumulated on the dermis in situations where the papillæ, subjected to undue pressure, or friction, or both, have acquired unnatural proportions. It not only lies upon the dermis, but penetrates into it. A corn may be *hard*, dry, and scaly; or, if situated in places where the secretions of the skin are confined, *soft* and spongy. When inflammation or suppuration takes place underneath a Corn, the Corn becomes excessively painful.

Callosity is a hard, thickened condition of the skin, covering a larger extent than a Corn, and may sometimes be seen on the front of both shins. It does not penetrate the dermis.

Causes.—Pressure from tight-fitting boots or shoes; or *high-heels*, which throw undue weight upon the toes; hereditary predisposition sometimes seems to favour their development.

TREATMENT.—As soon as a Corn appears, the surrounding skin should be softened by a warm foot-bath, the hard head of the Corn gently extracted with the finger-nail or some convenient instrument, and the thickened skin pared off, without wounding the adjacent parts. The Corn should then be dressed with *Arnica lotion* (thirty drops of the strong *Tincture* to a wineglassful of water), and next morning a piece of *Arnica-plaster*, or an *Arnicated corn plaster*, applied; or it may be painted with *Ferrum Perchlor.*, or *Castor-oil*. The dressing may be repeated several times, till the inconvenience is removed. The wearing of a *felt-plaster*, having a hole punched in it, so as to protect the Corn from pressure, is useful.

If internal treatment be necessary, *Calcarea* and *Sulphur* are generally suitable medicines. *Calcarea* may be administered every morning and night for a week or ten days; then, after waiting a day or two, *Sulphur* in the same manner. Afterwards, if necessary, the course may be repeated. *Ver.-Vir.* painted on inflamed Corns often gives rapid and lasting relief.

Dilute *Acetic Ac.* or *Salicylic Ac.* are also recommended as paints, but great care must be taken to only touch the corn itself, and not the surrounding skin, so as to cause it to become inflamed and tender.

SOFT CORNS are best treated by carefully cutting off the thickened skin with sharpened scissors, then applying a drop or two of diluted tincture of *Arnica*, and always wearing a layer of cotton-wool between the toes, changing the wool daily.

ACCESSORY MEANS.—Corns can only be *permanently* cured by wearing easily-fitting *boots* or *shoes*, often washing the feet, and frequent change of stockings.

223.—Enlarged Bursa (*Byrsa amplificata*)—Housemaid's Knee—Miner's Elbow.

DEFINITION.—Inflammation of a Bursa, with increased accumulation of synovial fluid. The bursæ most commonly in-

volved are those on the metatarsal joint of the great toe, called "Bunion;" of the knee-joint, called "Housemaid's Knee;" and of the elbow, called "Miner's Elbow."

Causes.—Kneeling or reclining on hard damp stones, pressure, blows, excessive use, and oblique traction of the skin in moving from side to side—*i.e.*, *friction.*

Symptoms.—Swelling and tenderness over a joint. In acute cases the pain is very severe, and there are much effusion, swelling, and fever; even suppuration may result. In chronic cases, a permanent swelling, from the size of a small egg to that of a large orange, gradually forms. The swelling is at first soft, but if neglected, the sac may thicken, be interspersed with fibrinous bands, and the bursa gradually pass into the form of a solid fibrous tumour.

Diagnosis.—Bursitis may be distinguished from Synovitis by the regularity of the tumour, and its situation in *front of and over* the patella, or olecranon.

Remedies.—*Arnica.*—Cases arising from *friction* or *bruises.*

Aconitum.—Much *febrile* disturbance.

Belladonna.—Considerable heat, *redness, and swelling* of the part, with *lacinating pains.*

Silicea.—This is generally the most effective remedy, and Dr. Wilde states never fails when used in recent cases.

Rhus.—Pain worse when sitting, and when *warm* in bed.

Ledum.—Pain, etc., with *chilliness.*

Iodium.—Chronic Bursitis in patients subject to *glandular enlargements.*

Kali Hyd.—With *rheumatic* complications. Graph. (*chronic cases with redness*); Agar. (itching); Hep.-S., or Sil. (*tendency to suppuration*); Bry. (*shooting pains*). Other remedies are Apis and Sticta. A lotion of *Acon.*, *Bell.*, *Bry.*, *Led.-Pal.*, *Rhus*, *Iod.*, *Agar.*, or *Arn.*, should be used when the same remedy is being administered internally.

Surgical Treatment.—If the above remedies are unsuccessful, a stout thread of silk should be passed through the centre of the tumour, the effect of which, in a few days, is to convert the bursa into an abscess, which, when mature, should be opened. The thread should be removed from the wound after the exudation of pus from the orifices made by

the needle. Opening the bursa with the knife, and painting the inside with *Iodium*, is a more satisfactory operation. When the tumour is solid, excision is the most effectual method, and one accompanied with little risk. (See next Section.)

224.—Bunion (*Bunion*).

Definition.—An enlarged bursa, generally situated over the metatarsal joint of the great or little toe, chiefly the former, with more or less deformity of the joint. It may, however, occur over any bony prominence that is compressed and irritated by the artificial and arbitrary shape of modern boots and shoes.

Causes.—The *pressure of narrow-pointed boots or shoes*, throwing the great toe over or under the contiguous toes; in this way a sharp angle is made on the side of the joint on which the Bunion is formed. Very hard leather creased over the joint, or patent leather, which stops transpiration from the skin, favours the formation of Bunions. Some families have a constitutional tendency to this disease. To study rightly the exciting cause of Bunions, it may be well to revert to the natural form of the foot as seen in savage tribes, and in the shoeless children of London streets. It will be found that the perfect foot is widely spread towards the toes, there being a considerable interval between the first and second toes along the whole of their contiguous margins, and the other toes being more or less separated, particularly when the weight of the body is borne on the front of the foot. The inner line of the foot and great toe is nearly straight, a prolongation of the central longitudinal axis of the great toe passing through the centre of the heel.

In the adult foot that has been contorted by the conventional narrow shoes, the toes are found in close contiguity, or even bunched up, one or other being doubled under the rest, all the toes inclining towards the middle line of the foot.

Symptoms.—Pain, redness, and swelling of the part, which soon subside on removal of the cause. Should, however, undue pressure be continued, the symptoms increase until pressure

becomes unendurable. After this, on discontinuing the offending boot or shoes, the pain subsides; nevertheless, a permanent Bunion has been formed, and inflammatory symptoms are at any time liable to recur from irritation.

Treatment.—In recent cases, the sac is thin and may be ruptured by pressure, and when the contents are evacuated, the disease is arrested. In time, the cyst becomes thickened, and this proceeding is no longer available. In this case, the direction of the toe must be changed by wearing properly-shaped boots, made with the inner side of the sole straight from the toe to the heel. If irritation be accidentally excited in the part, a warm foot-bath should be used, and afterwards a *lotion* (twenty drops of *Arn.* ϕ to two tablespoonfuls of water), continuously applied, for two or three days. If the patient has the least erysipelatous tendency, *Ruta* should be substituted for *Arn.*, or a lotion of *Kali-Iod.* (ten grains to the ounce) may be applied at night as a compress. When matter forms, a linseed-meal poultice will be more suitable; at the same time *Hep.-S.* may be given every four hours, followed, if necessary, by *Silic.*

Veratrum Viride.—Painted on inflamed Bunions, this remedy generally gives rapid and lasting relief.

Rhododendron.—Rheumatic enlargements.

Prevention.—If the *Arnica* or *Ver.-Vir.* lotion be used immediately the first inflammatory symptoms arise, and all undue pressure be at once discontinued, the formation of a Bunion may be altogether prevented. (See Section on "Enlarged Bursa.")

225.—Nævus (*Nævus*)—Port-wine Stain—Mother's Mark; and Nævus Pilaris—Mole.

Definitions.—*Nævus* is a hypertrophied state of the blood-vessels of the skin, forming slight flat elevations of a bright-red (*arterial*) or purplish (*venous*) colour, occupying an extent of surface varying from the size of a pin's head to many inches.

Nævus pilaris is a Nævus covered by hair of variable length, and, like ordinary Nævi, is liable to occur on any part of the body.

Nævi are usually congenital; they are popularly called "Mother's marks," from a supposition that they are produced on the child before birth through some fear or fancy of the mother; and are variously named, according to their apparent resemblances, — "cherry-," "strawberry-," or "mulberry-stain," etc.; and if the Nævus be hairy, it is called a "mouse-mark," etc.

In many cases, no inconvenience results except the deformity; but occasionally, more especially when the growth is at all prominent, there is great disposition to unhealthy ulceration. When bleeding occurs, it is usually in a trickling stream, and without any degree of force (*Erichsen*). Nævi often die away without interference.

Treatment.—When treatment is desirable, the internal and external use of *Thuja*, as recommended for Warts (see Sec. 227), is sometimes successful. *Calc.-C.* is also homœopathic. Dr. Hempel states that Nævi may be removed by the external use of *Kreas.*, one drop of the tincture to eighty of water, applied two or three times a day, the effects being excoriation, ulceration, and cicatrisation, with scarcely any disfigurement remaining. *Croton oil* is reported to be equally efficacious. *Ac.-Nit.* has the reputation of destroying small Nævi, if applied as soon as the red spots appear. Continued pressure will also kill them.

Phos. and *Lyc.* are also recommended.

The surgical treatment recommended by Mr. Skey is the *Seton thread.* When the Nævus is large, threads should be passed across the growth in various directions, and not necessarily through its centre, but occupying its substance in all directions. A large Nævus may require six, eight, or ten threads. Suppuration is the object aimed at, and when detected by the oozing of pus, the thread or threads should be removed; and when the Nævus is conveniently placed for the purpose, a little pressure should be applied. But we should not have recourse to surgery until we have seen whether the mole disappears spontaneously, or in consequence of medical treatment.

226.—Sebaceous Tumour (*Tumour Sebaceus*)—Wen.

DEFINITION.—A Tumour composed of suety or fatty matter (*Steatoma*), and enclosed in a sac beneath the skin, occurring from obstruction of the secretory ducts.

These Tumours arise on various parts of the surface of the body, are smooth, non-elastic, pendulous, and movable; they slowly increase without pain, often to a very great size; attain their greatest development in warm climates—especially in the Hindu and negro races—where they have been met with of an enormous weight and size.

TREATMENT.—If Wens are likely to be amenable to medicines, *Bary.-Carb.*, *Sil.*, *K.-Hydriod.*, *Lyc.*, *Calc.-C.*, and *Sulph.*, are, we believe, the most appropriate. Additional remedies are *Coni.*, *Hep.-S.*, *Ac.-Benz.*, and *Phyto.* In our own practice we have found *excision* generally needful, and have thus removed many without their ever returning. But Dr. Belcher has recorded a case in which a crop of Wens on the head, of very old standing, rapidly disappeared under a short course of *K.-Hyd.* (1x dil).

227.—Warts (*Verrucæ*).

DEFINITION.—A small, hard tumour, consisting of elongated and enlarged papillæ of the cutis vera, clothed with a stratum of hypertrophied and hardened cuticle, chiefly affecting the hands and face of young persons, appearing and disappearing without any particular known cause.

TREATMENT.—*Thuja.*—The Warts should be painted twice daily with the matrix tincture; at the same time, a dilution of *Thuja* may be administered morning and night. The latter is especially necessary when the Warts appear in crops. This course may be followed for a week or two, and if improvement ensue, as it generally does, the treatment should be continued longer. When *Thuja* does not succeed, *Rhus* may be substituted, and used in the same way.

Sulphur once a day, for a week or two, is an excellent remedy for numerous and obstinate Warts upon the hands.

It is also useful after other medicines, to eradicate the tendency to recurrence. *Dulc.* 3 is also said to be often successful, causing the disappearance of a large number of Warts in a few days.

Ant.-C. 1 has also proved curative; so also has *Ac.-Nit.* ext. *Calc.-C.*, *Nat.-C.*, *Ferr.-Picric.*, *Kali-Mur.*, and *Sep.* are recommended; also the local application of *Glacial Acetic Acid* or *Chromic Acid.*

228.—Parasitic Diseases of the Skin (*Morbi cutis parasitici*).

The principal vegetable parasites which grow upon the human body are fungoid in their character, and are as follows.

Tinea Tonsurans, *T. Kerion*, and *T. Circinata*, caused by the same parasite, constitute the same disease, the *Trichophyton*, or *Achoriæ Sebertii.*

Tinea tonsurans (*Tinea capitis*), the common scurfy *Ringworm of the Scalp*, is generally seen only in children, is contagious, but not necessarily associated with impaired health, though it is common in lymphatic persons. It consists of circular patches varying from half an inch to several inches in diameter, the hairs of which look dry, withered, and as if nibbled off at a short distance from the scalp.

T. Kerion is the same disorder, with increased inflammation of the hair follicles, and special secretion of viscid mucus.

T. Circinata (*Tinea corporis*), only differs from *T. Tonsurans* on account of its appearance on those parts of the body which are not hairy.

The fungus is visible in a good light, appearing like powdered *sulphur* when *Chloroform* has been applied. When this effect of Chloroform ceases to appear, the patient may be safely declared cured, and no longer capable of conveying the infection. In *T. Tonsurans*, "perhaps the plainest and easiest guide to disease still existing is the presence of short broken-off hairs. But no one can arrive at a really safe conclusion in some cases, without a microscopical examination."

Tinea decalvans (*Alopecia areata* or *Porrigo decalvans*) consists of smooth, circular *patches of perfect baldness*, quite pale, of variable size—half an inch to two inches or more in

diameter, and of which there may be several: the disease is sometimes seen in young persons, chiefly in girls, but is most common in adults. It is a pure and simple atrophy. The parasite is the *Microsporon Audouini*.

Tinea favosa (*Favus* or *Porrigo favosa*) is the *crusted* or *honey-comb Ringworm;* it is uncommon in England, but is seen in some parts of Scotland. It commences when the patient is about seven years of age, and is characterised by the presence of small straw- or sulphur-coloured cupped crusts, which coalesce and give rise to a honey-comb appearance, or remain separate. It is contagious, and is the most common and inveterate form of Scald-head. Its parasites are the *Achorion Schonleinii* and the *Puccinia Favi*.

Tinea versicolor (*Pityriasis versicolor* or *Chloasma*) commences as small erythematous points, with itching, which is increased by warmth: slightly elevated, dry, rough patches, of a fawn-colour, arise, somewhat scaly at the edge, and from which branny scales can be rubbed off; they occur on the chest, abdomen, and arms, vary in size from that of a threepenny piece to that of the palm of the hand, and are much irritated by flannel. It is sometimes called *variegated Dandriff*, or *Liver-spots*. The parasite is the *Microsporon furfur*.

There are several members of the *Ectozoa*, as we have stated in the section on "Worms," which are also parasitic to man, the most common of which, except *Scabies*, are mentioned below.

Phthiriasis is the condition of the body favourable to the existence of *pediculi*.

Irritation of the skin caused by these creatures is classed as a parasitic disease. Thus there is the irritation caused by the *Pediculus capitis* (head-louse), often associated with Eczema and other skin diseases; by the *P. palpebrarum* (louse of the eyelids); by *P. vestimenti* (body-louse); by *Phthirius inguinalis* (crab-louse); by *Pulex penetrans* (Chigoe), an insect of the West Indies, which chiefly attacks the toes or spaces between them, is black, causes extreme itching, and even Ulcers; by *Pulex irritans* (the common flea); by *Cimex* (the bug); by *Leptothrix autumnalis* (harvest-bug), which is common in grass in autumn, and, getting on to the body of man, though exceedingly small, produces extreme irritation of the skin; etc.

Under this head also comes irritation from the stings of *Wasps, Bees,* etc., the treatment of which may be found in Section 230.

TREATMENT.—There is no great difficulty in the treatment of the Epizoic or Ectozoic class of parasitic diseases, except when associated with true skin-disease. Even then, correct treatment is often successful.

Sepia is the best remedy for Ringworm of the scalp, and if administered early will often prevent the increase of the disease. *Ars., Calc.-Carb.* and *Sulph.* should also be remembered as useful remedies, combined with hygienic measures, in procuring and retaining a healthy condition of the skin.

As a local application, take one part of *Carbolic Acid,* and mix with ten parts of *Canada Balsam.* Paint over the parasitic patches, and allow it to dry. Afterwards colour with ink or Indian ink. In ten or fifteen days, the fungi will be killed, and the disease eradicated. *Oleate of Mercury* is a more sightly application, and is said to be painless and prompt in its action. It should be rubbed in gently, except in slight cases or when the skin is very sensitive, when a weaker solution (five per cent.), applied with a camel's-hair brush, will answer the purpose better. The oleate possesses greater penetrating power than either the aqueous or spirituous solutions, and this may be still further increased by an addition of ether (one part to eight). Or, a lotion consisting of one drachm of the tincture of *Phosphorus,* with one ounce of Castor-oil, applied by friction half an hour at a time, three times a week, after washing the part in warm water, will usually restore the hair in six months.

A simple and effective method of treating *Ringworm* is as follows:—The child should sit before a basin half-filled with *warm water,* a towel fastened round the forehead in such a manner that no fluid poured on the head can trickle into the eyes. The hair should be cut short round the affected part, or if there are many spots the head may be closely cropped. Have ready a two-ounce bottle of *Spirit of Turpentine,* an ounce bottle of *Tincture of Iodine* and a cake of *Carbolic Soap.* While the child bends over the basin, the spirit of *Turpentine* is poured freely over one or more spots at a time, the fore-

finger being used to freely rub the *Turpentine* well into the scalp. The dirt and greasy scabs disappear, and the short hairs stand up like bristles. Then the *Carbolic Soap* is well rubbed into the parts that have been acted upon by the *Turpentine*, and the warm water freely applied to make a lather, by which the head is well washed and soon appears beautifully cleaned. The smarting soon disappears after the application of the *Soap*. The head is then well dried. Tincture of *Iodine* in two or three coats is now painted well over the affected parts and allowed to dry. As soon as the hair is dry, some *Carbolic Oil* (1 in 20) is rubbed all through the hair to catch such spores as may be there. This treatment applied every morning, or, in bad cases, morning and night, generally cures the worst cases in the course of a week.

Strict cleanliness, the free use of soap and water, is a *sine quâ non*, and in some cases may be alone sufficient; but if seconded by the application of *Sulphurous* or dilute *Carbolic Acid*, either as a lotion or by spray, a cure will certainly be effected. Nourishing diet is required. Isolation of person, and of brushes, towels, etc., is necessary to prevent further infection. Disinfection of rooms may also be required.

The irritation from flea-bites, etc., is amenable, when necessary, to the treatment directed in Section 230.

Preventive Means.—*Perfect habitual cleanliness*, and proper attention to health.

229.—Scabies (*Scabies*)—Itch.

Definition.—A contagious disease, characterised by a vesicular eruption, presenting numerous watery conical pimples, with violent itching, aggravated at night, and by scratching, depending essentially on the burrowing into the skin of a minute parasite—*Sarcoptes hominis*, or *Acarus Scabiei*, or Itch-insect.

It spreads quickly among the dirty, but has become much less frequent amongst the poor since they have enjoyed *better diet*. Warmth enlivens the mites, and they spread to other patients sleeping under the same bed-clothes.

The violence of the symptoms depends on the number of

the parasites present, the length of time the patient has been affected, and the degree of sensibility of the skin. The disease may occur on any part of the body, but generally affects delicate parts, such as the thin skin in the flexures of the joints, especially the wrists and between the fingers, the mammæ, and the penis. In children, the buttocks, the inner line of the sole of the foot, the ankle, and the palmar surface of the hand, are most infected.

Persons that are well-to-do, well-fed, and cleanly, do not exhibit all the symptoms we may observe in others. Papules, pustules, and vesicles may be almost or altogether absent, and the presence of the insect can be detected only by the cuniculi or furrows which it makes, thus causing the itching which is so intolerable at night. Such cases are more common in private practice. The furrows are the diagnostic mark of Scabies.

Treatment.—In our own practice we have found the free application of *Sulphur-ointment* rapidly effective in destroying the insect and its ova. After thoroughly rubbing the whole body with soft soap and warm water, then washing in a hot-bath, or with hot water, and wiping thoroughly dry, the superficial and effete cuticle is removed, and the burrows and parasites freely exposed; the ointment should then be well rubbed into the parts affected or likely to be so, and allowed to remain on the body all night. On the following morning, a tepid bath, using yellow soap, to wash off the ointment left on over-night, completes the cure. If the application of the ointment and the ablutions be not thorough, the processes should be repeated once or twice. *Sulphur-ointment* must not be continued too long, or it will produce an irritable state of the skin, which may be mistaken for a persistence of the disease; indeed, over-treated cases of Itch are by no means uncommon in private practice. The administration of *Sulphur*, during the use of the ointment, and for two or three days subsequently, is useful. Painting the affected parts with *Oil of Lavender* is also recommended. All contaminated linen should be put into boiling water; other garments should be well ironed with a hot iron, or exposed to hot air at a temperature not less than 180° Fahr.,

or well fumigated with the vapour of *Sulphur*, to destroy any insects or ova concealed in the textures of the linen. The bed may be disinfected by using a little *Sulphur* sprinkled on warm cinders in a warming-pan. The cure is often retarded, and the disease conveyed to others, by neglecting to carry out these suggestions as to clothing.

230.—Irritation caused by Stinging-Insects and Plants (*Irritatio orta ex insectis et plantis aculeatis*).

The most common insect-stings and bites are those of the Wasp, Bee, Hornet, Gnat, and Musquito. These, though painful, are not serious, except when a tender part, or sensitive or important organ of the body, is attacked; or when the multiplicity of the wounds is so great as to produce general or venomous symptoms. Thus a man has been stung to death in a short time by a swarm of bees; when the eye is stung, the consequences are liable to be serious; and a sting in the pharynx, as from swallowing a piece of honey-comb with a bee concealed therein, may be very dangerous. Musquito stings are peculiarly irritating, and, when numerous, poison the blood, producing nervous depression and great febrile irritation. Some insects, as Scorpions, or the Tarantula in Italy and Russia, give rise to more serious and even fatal disturbance or stupor by their bite.

In India and other hot countries, various other insects, besides the musquito, attack man, and are sources of irritation and annoyance; "for every animal, insect, or reptile, in the warmer lands, is distinguished for its ferocity and pugnaciousness." The *ant*, especially the *black-ant*, and the *cockroach*, are common and troublesome—the latter commonly on board ship. It attacks the toes of persons asleep, and this so insidiously that the sleeper is not awoke until the quick is reached and the blood flows. The eyebrows, as well as the toe-nails, are also liable to suffer, unless protected. "There is a small *black-beetle* in India, found in the short grass and herbage, which is dangerous to persons lying on

the ground, as it attempts, if possible, to enter the ear. Children are frequently attacked by it, and the agony caused is extreme. The only effectual remedy, and it is effectual, is to pour a little oil into the ear, which so disgusts the beetle that it backs out, leaving the person uninjured. Such, however, would not be the case if force should be attempted in the extraction."

Nettle-stings, and those of other plants, do not cause much disturbance besides the local irritation.

Treatment.—*Ledum Palustre* is the most useful remedy for common stings and bites. It should be applied locally, in a diluted form—twenty drops of the tincture to half a wine-glass of water. Should *Ledum* not be at hand, *Rhus Tox.* or *lime-water* may be substituted. A few drops of fresh lime-water, prepared by steeping a small piece of quicklime in a tumblerful of water, is a ready and successful remedy. A good absorbent eases pain; lean fresh meat is such, and has relieved the pain of wasp-sting almost instantly. If neither of these remedies be available, *Allium Cepa* (the common onion) should be promptly applied: a piece cut off and at once placed on the wound. Indeed, Dr. Hill uses no other remedy than this for stings, etc.; if the pieces of onion are changed every few minutes, the pain, he says, diminishes immediately. *Camphor* also is useful. If there be much swelling, *Apis* should be given. *Acon.* will speedily remove febrile symptoms. *Grindelia* is also recommended. For Venomous and Poisoned Wounds, see the next Section.

Accessory Measures.—If a wasp or other stinging-insect be the cause of the trouble, examination must be made for the sting, as this is often left in the wound; if present, it must be carefully extracted by the fingers or by a pair of fine-pointed forceps. If this cannot be done, and the sting has entered the skin perpendicularly, the pressure of a small key may be tried: the centre of the hole should be placed over the wound enclosing it, and gentle pressure should be used; when, probably, the sting will be squeezed out. The wound should then be well sucked to extract the venom as directed in the next Section. After this, the lotion should be applied; or, if pain be very great, hot fomentations.

Musquitoes may be prevented from troubling in the night by taking the precaution of rubbing a little soap on the hands before going to rest. This is said to be a certain remedy. Honey is also good, but from its sticky nature is more disagreeable than the soap. Probably the best prophylactic is a dilute solution of Carbolic acid, which may be applied to the exposed parts of the body, and will effectually prevent insectile invasion. The hands, face, and other exposed parts should be washed with a weak solution once or twice daily. The *Cockroaches* of hot climates may be got rid of, it is said, by burning the bodies of two or three, and letting them lie about; the smell drives the rest away.

231.—Poisoned Wounds (*Vulnera Veneno Infecta*).

Definition.—"Wounds inoculated with foreign matter, producing general symptoms, or propagating inflammation to other parts of the body."

Varieties.—Poisoned wounds may be made by venomous animals—Snakes, Scorpions, etc.; by animals having infectious disease; by dead animal matter; by morbid secretions; by vegetable substances; poisoned arrows; subcutaneous injection, etc.; or by mineral substances.

Serpents are venomous in a variable degree, according to their nature, size, or vigour: some cause immediate death by Convulsions; others produce Inflammation of the lungs; others induce death by slow poisoning, or by the unhealthy or diffuse Inflammation which they excite.

The *Viper* is the only poisonous snake in the British Isles, and its venom does not often produce death in human beings except when the victim is a child or very weak person.

Deadly snakes are generally distinguishable by the *thinness* of the neck, immediately behind the head, and by their *graceful* forms and *brilliant* colours; also by their having only two teeth in the upper jaw.

Treatment.—The *immediate* treatment of poisoned wounds is highly important; especially if they result from the bites of venomous reptiles.

(1.) The first object to be attempted is arrest of the circulation of the poison. A handkerchief, rope, or anything else to serve the purpose, should be tied tightly round the limb, between the wound and the heart. While this is being done, if possible a second person should extract the poison as suggested in the next paragraph.

(2.) The wound should be sucked with all the force the patient can command; or, if unable to do it himself, an attendant should do it for him. No danger attaches to the person thus sucking the wound so long as the poison does not come in contact with any *abraded* or otherwise imperfect surface of the mouth or other part of the body.

(3.) *Alcohol*, in any of its forms—brandy, whisky, gin, etc.—according to Dr. Hill's testimony, should be drunk largely by the patient. He says, "Let him drink it freely, a gill or more at a time, once in fifteen to twenty minutes (or small doses oftener), until some symptoms of intoxication are experienced. . . . It is remarkable how much alcohol a patient suffering from the poison of the Rattlesnake will bear. A little girl of ten years, who had been bitten by a Rattlesnake, took over three quarts of strong whisky, in less than a day, when but slight symptoms of intoxication were produced. She recovered from these symptoms in a few hours, and suffered no more from the poison of the serpent. Instances of cures with whisky are numerous, and I have never heard of a failure, when it was used as here directed. I presume it will do the same for the poison of other serpents." Alcohol so prescribed is given as a material antidote to a material poison.

(4.) *Carbolic Acid*, applied locally, and administered internally, in cases of poisoned wounds. The following treatment is recommended: the instantaneous application of strong *Carbolic Acid* to the part, every portion of the wound being made to come in contact with it; the immediate administration of a strong stimulating emetic, and the subsequent use of stimulants; and suggesting that the value of Carbolic Acid may depend on its neutralisation of the poison, and also its power of preventing decomposition.

(5.) *Arsenicum*, in a low potency (1st or 2nd dec.), may be

given if symptoms of rapid prostration occur. Thus administered, it tends to correct the poisoned condition of the blood, and acts strictly homœopathically.

(6.) *Nitrate of Silver* is also considered a good remedy, and should be used freely.

Guaco Milk is regarded in South America as the best remedy for snake-bites.

Professor Halford, of Melbourne, speaks of the injection of *Ammonia* into the veins in cases of snake-poisoning, in the most eulogistic terms, and brings forward strong evidential warrant for his statement.

Excision of the wounded part may be required in some cases; but would probably be rendered unnecessary by the *Carbolic Acid* treatment just pointed out.

Other poisoned wounds should be treated according to their nature by appropriate antidotes. In the case of wounds from the introduction of mineral substances under the skin, those to which workmen—mechanics, founders, and others—are liable, the offending material has generally lodged in the body and produced disturbance in the part before its presence is suspected. Inflammation is the result, and suppuration should be encouraged, as this is usually the only method of eliminating the poison. The treatment recommended for Abscess is appropriate to this condition, with, in some cases, the aid of *Arsenicum*.

CHAPTER XII.

Miscellaneous Diseases.

232.—Angular Deformity of the Spine (*Deformitas Angularis*)—Kyphosis—Lordosis—Pott's Curvature.

Definition.—A deformity of the spinal column due to caries of the anterior bone and cartilage, and characterised by an angular projection, or hump, formed at the chief seat of disease.

The disease is a morbid ulcerative process, which gradually

disintegrates and absorbs the bony tissues, then the cartilaginous tissues, meanwhile discharging pus from the ulcer. The anterior segments of the mid-dorsal region (sometimes as many as five or six) are the special seat of the disease, which ascends upward and downward, but rarely attacks the posterior segments. The curvature is therefore *anterior*. *Posterior curvature* usually affects the cervical and dorsal regions, and may be produced in infants by placing the hands under the armpits, and compressing the ribs, thereby pushing back the sternum and spine, in act of lifting or jumping the child.

Causes.—Angular deformity is generally developed in children of strumous or other unsound constitution. Sometimes a fall, a blow, or other local injury is referred to as the immediate cause of the disease; but the true cause is to be found in systemic cachexia. In the majority of cases the disease commences before puberty, seldom after. The progress is not necessarily rapid, hence the deformity may not become prominent till adult life.

Diagnosis.—The first indication that manifests itself is the prominence of one or more of the vertebræ. The disintegration having destroyed intermediate anterior processes, the muscles draw the upper and lower together, and thus cause the posterior processes to protrude beyond the perpendicular line. But early diagnosis is sometimes difficult on account of the suppleness of the spine. A weakly child always stoops, even if there be no disease. If disease be feared, observation should be made from time to time as to the continued prominence of a vertebræ when the child sits or stands upright, and further observation will detect deformity if the child be laid upon his stomach, his hips raised above the level of the spine, and the prominence still continue. Deformity may also be detected by the rigidity of the diseased part, as compared with the suppleness of the healthy part, of the spine. If the child stoop and rise alternately, or move laterally towards one side and then the other, the rigidity may be detected by the eye observing the movements of the column, and confirmed by the hand placed flat upon a number of vertebræ feeling the absence of flexibility in the diseased part. When a child is the subject of Angular Deformity, the natural tendency of his head is to

incline forward when he walks. To counteract this tendency, and to maintain his equilibrium, he throws back his head and the upper part of his body. By persistence in this, the angle itself is also carried back; hence the "hump" which constitutes the prominent feature of the deformity.

Symptoms.—When the disease is acute, and the ulceration in active progress, heat and swelling are produced: the former can be best detected by the thermometer. There are the usual conditions of debility—coldness, numbness of the legs, twitchings, sometimes spasms, and ultimately Paralysis of the lower extremities and organs. The chest is seriously implicated, and dyspnœa is more or less constant. Pain is not always present; a depressing jerk upon the shoulders when the patient is upright, or a short jump, or percussion, may cause pain in the diseased vertebræ. Habitual tenderness, or dull aching pain in a particular part of the spine, is a symptom of disease. But neuralgic pain may exist without disease. If it continue for a long period without any appearance of deformity, it may be assumed that there is no abscess and no curvature.

Terminations.—In favourable cases, with good treatment, the disease may suddenly cease; bony fusion of the bodies takes place, inflammation and irritation terminate, and the patient recovers with more or less incurable deformity. Sometimes the disease terminates fatally by the carious bones suddenly giving way and crushing the spinal cord; or from the bursting of Abscesses into the cord, or into the chest, or from paralysis and its concomitants. More frequently, however, death results from prolonged irritation and exhaustion.

Treatment.—Attention should be given to the constitutional cachexia, and the following remedies be administered as may be most appropriate: *Calc.-Phos.*, *Calc.-C.*, *Ac.-Phos.*, *Sil.*, *Hep.-S.*, *Sulph.*, *Asaf.*, *Mez.*, etc. (See also Section 72 on "Scrofula.")

One important feature of the treatment is to relieve the pressure on the diseased bones and cartilages; and to accomplish this, rest in the recumbent posture for a long period is absolutely required. Generous, nutritious diet must be given, and deleterious elements avoided. Bathing and friction should be daily practised. When sufficiently recovered, out-

of-door exercise in fine weather, with suitable supporting apparatus, should be secured.

233.—Lateral Curvature of the Spine (*Curvatura ex transverso*)—Skoliosis.

Definition.—An inclination of the spine from the natural erect form to the right or left side, chiefly affecting females from about the age of ten to sixteen or upwards. A curvature is said to be right or left according as the convexity of the curve is towards one or other side. The spine assumes a double curvature—one being caused by an external agent, as muscular force, and is termed primary; the other is a compensatory curve in the opposite direction to restore the balance disturbed by the primary curvature, and is termed secondary.

Symptoms.—The spine is curved, and also twisted in its long axis. The upper curve is generally in the upper part of the spine, and is to the right hand; the lower one, caused by compensating effort, is in the loin and to the left hand. The two curves shape the spine something like the letter **S**. This is the most common curvature. One of the scapulæ, or one side of the bosom, projects, and the right shoulder and right side of the chest are preternaturally high and rounded, while the opposite are depressed and concave. Correspondingly, the left hip projects, and the loin on the right side is curved inwards. As a consequence of these deformities, the free play and action of the enclosed viscera are impeded, and the movement of the muscles of the trunk is impaired. There is often difficulty in taking full inspirations of air into the lungs; hence dyspnœa supervenes. The general health also is liable to suffer.

Causes.—Spinal curvatures are readily produced, especially in weakly patients, by occupations and pastimes that tax one side of the body more than the other; bad postures while sewing, ironing, writing, drawing, reading, playing the piano, riding, carrying a child on one arm, and in the exercise of many kinds of handiwork. Even bad postures in lying, sitting, and standing, are liable to cause Lateral Curvature.

All occupations which require the raising of one shoulder-blade and arm, standing at ease on one leg, using one foot rather than the other in going upstairs, crossing the legs, sitting on one side of the seat, leaning on one hip; want of unrestrained open-air exercise; tight dresses; stays and bodices with steel, whalebone, or wooden supports, may operate as causes of curvatures. One leg being shorter than the other, walking with an artificial leg, Hip-joint disease, Rickets, paralytic affections of the lower extremities, Rheumatism, etc., may also cause distortion. Frequent repetition of an attitude in which the spine is curved will, in time, produce deformity. Young ladies ought even to be cautioned against excessive horse-exercise, for the oblique posture in which the female form rests, when seated on the side-saddle, renders it next to impossible for the spine and hips to maintain their normal relations to each other. The *modus operandi* by which one-sided postures cause Curvature may be easily explained. It is the compressibility of the intervertebral substance, which is so considerable that an adult person loses about half an inch of his height after having been in the erect posture all day, and does not regain it till after he has been lying at rest for several hours. Now, as the united thickness of the intervertebral fibro-cartilages in adults is about 3·875 inches, we see that they lose nearly one-eighth by the day's compression, and the normal resiliency is not recovered till after hours of rest. "But if the weight of the body fall unequally on the vertebræ day after day, it must be evident that they will become compressed on one side more than on the other; and that if their elasticity be impaired, and the muscles and ligaments be weak, and the bones soft, as they are in young persons who have not a sufficiency of fresh air, wholesome food, and active exercise, this lateral distortion will become permanent," especially in a growing, delicate patient.

Treatment.—This must be both constitutional and local, and be regulated by the nature, extent, and cause of the deformity. Whether the Curvature be purely accidental, or the result of a predisposing rickety or scrofulous diathesis, the whole organism soon unavoidably suffers from the local

mischief, and constitutional treatment becomes necessary to correct or prevent reactionary consequences. If treatment is neglected, Curvatures, however slight, will certainly get worse, for the extreme flexibility of the spine in youth, while it offers a favourable condition for cure, equally tends to an aggravation of the deformity if treatment is neglected. Further, as rigidity of the column increases with years, so the prospect of improvement diminishes; at the same time, and for the same reason, Curvatures of long standing, in persons of mature growth, are less likely to grow worse.

1. Remedies.—*Calc.-Phos.*, *Calc.-C.*, *Ac.-Phos.*, *Sil.*, *Puls.*, *Sulph.*, *Nux V.*, *Arn.*, *Rhus*, etc. Externally, a weak *Arnica Liniment* may be used.

2. Hygiene.—Good diet, including in some cases *Cod-liver oil;* strict abstinence from pastry, and other unwholesome food; pure air, if possible sea- or mountain-air; bathing of the whole body, and especially the back, with cold salt-water, followed by vigorous friction and shampooing, to strengthen the muscles and ligaments of the spine; a mattress instead of a feather bed, and a low pillow, to sleep on; early hours for rising and retiring; warm, easy, and light clothing, especially avoiding stays, tight-fitting boots, garters, etc.

3. Gymnastics.—A suitable course of gymnastic exercises in the open air, or in a well-ventilated room, must be intelligently adopted, and graduated to the strength of the patient. No degree of weakness should be urged against their use, for the weaker the patient, the more necessary becomes the treatment, and some one of the following methods will doubtless be found suitable, as scientific gymnastics may be applied to effect a cure in muscular deformities, either actively, semi-actively, or passively. In the first instance, the patient, by an effort of will, calls certain muscles into play to overcome some resistance, as in raising a weight; in the second, his muscular force is exerted to resist a counter-force in another person; and in the third, certain muscular movements are produced in him by an operator, independently of his own efforts. In addition to bringing the left arm and leg prominently into play, to defeat the bad effects of a previously exaggerated use of the right arm and leg, the patient's efforts should be directed

continually to producing and maintaining a strong extension of the trunk and vertebral column. This extension may be effected passively by hanging from the cross-bar swing, or actively by holding the body erect, and raising a rod of about a yard in length, held in both hands, above the head. The object in medical gymnastics is to give strength to the muscular and nervous systems. The organs of respiration should be roused into activity by easy movements of the thorax, and successive deep inspirations; and growth and nutrition increased by exercises which tend to strengthen the abdominal muscles. The exercises must be continued for a considerable time, say a year, or longer, as the desired changes can only be gradually brought about. The patient needs regular supervision to correct the various faulty postures which are enumerated above. "Mechanical support," as it is termed, is scarcely ever necessary, and is often productive of the worst results. Machines are constructed something like stays, having a steel band passing round the hips and abdomen, steel rods, crutch-handles, etc. These require screwing up or adjusting once or twice a week by a specialist, are most unwholesome instruments, and, according to our observation, intensify the evils from which the patient suffers. To fix a portion of the body, which nature intended to be most mobile, immovably in one of these machines, particularly at an age when the flexible and yielding body is continually varying its size and shape, not only interferes with the respiratory movements, but weakens and subsequently destroys muscular power, that power on which we rely for maintaining the erect posture when treatment is suspended. We have repeatedly advised the removal of these machines, and adopted rational measures and treatment, to the great relief of patients, and their subsequent early recovery. Later in life, the vertebræ and ribs become more fixed and solid, and a better fulcrum can be obtained at the pelvis for the contrivances which are designed to strengthen and support the column. But, unfortunately, by the time these instruments could be applied with less injury to the structures, the Curvatures have become too rigid for them to be of any avail. Division of the muscles is rarely, if ever, necessary. Electricity is only of temporary and doubtful benefit.

234.—Morbus Coxæ (*Morbus Coxæ*)—Scrofulous Disease of the Hip-Joint.

Definition.—A chronic or strumous inflammation, sometimes originating in the synovial membranous ligaments, and sometimes in the articulating surfaces of the bones.

It is a slow, insidious, and serious disease. The child is supposed to be suffering from "growing pains" for months before the disease assumes an active form.

Symptoms.—The first distinctive symptoms are — slight pain, *chiefly referred to the knee,* lameness, and weariness. There may be even slight swelling in the knee-joint, so that remedies are often applied here, but the disease is in the hip. This may be proved by pressing either in front or back of the hip-joint, or by jerking the thigh-bone against the joint, or by jerking the thigh-bone against the joint, as by a sharp tap on the heel, when pain will be felt in the hip. As the disease progresses, the buttock of the affected side wastes and becomes flabby; the limb is shortened, either by caries of the neck of the femur, or by destruction of the ligaments of the joint and consequent dislocation of the joint upwards on the *dorsum ilii.* This is termed *spontaneous dislocation.* There is augmented fulness about the limb, the pains increase in severity, especially at night, and there are often startings of the limbs during sleep; Abscesses form, and afterwards burst on the nates or groin, or burrow deeply and discharge their contents into the rectum. Wasting of the nates of the affected side is one of the earliest symptoms of disease of the hip.

The duration of the disease varies from two or three months to several years. But it is much modified, both as to its duration and results, by skilful treatment.

White Swelling of the joints is a disease of similar character. The swelling in the knee-joint is probably due to pressure on, or irritation of, the branch of the obturator nerve distributed to the capsular ligament, and *ligamentum teres* referred to the terminal cutaneous branches of the same nerve.

Treatment.—The medicines likely to prove beneficial are—

Acon., *Bell.*, *Coloc.*, *Hep.-S.*, and *Ars.*, in the early stage of the disease; for special symptoms, *Calc.*, *Sil.*, and *Phos.* Additional remedies are *Ac.-Phos.*, *Chin.*, *Kali C.*, *Arg. Met.* When Abscesses have formed, and suppuration is established, the treatment recommended in the next Section is appropriate.

Accessory Treatment.—Rest, with the limb in a straight posture, and absence of articular pressure, the latter being, probably, the more important element; surgical appliances are often necessary to ensure it. The *diet* should be nourishing, and include *Cod-liver oil.* Pure air, and especially a change to the sea-side, will expedite the cure. If Abscesses form, they should be kept free from fœter by means of *Carbolic Acid.*

235.—Abscess (*Abscessus*).

Definition.—A collection of matter in any tissue or organ, deposited within a sac or cyst of organised lymph, and supplied with absorbent and secreting vessels.

a. Acute Abscess commences with throbbing pain, bright redness, and swelling of the part; these symptoms are soon followed by suppuration, which is marked by an alteration in the colour of the skin, and a change in the character of the pain, the former becoming livid, and the latter less acute, being rather felt as a sensation of weight and tension. "After this, the parts between the Abscess and the surface become successively softened and disintegrated. The tumour becomes more and more prominent; the centre exhibits a dusky-red or bluish tint, the cutis ulcerates, the cuticle bursts, and the pus escapes. But where pus is formed under dense fasciæ, or deep in the breast or pelvis, and cannot quickly make its way to the surface, the pain is not relieved, but much aggravated by the increase of distention; and the constitutional fever and chills are much more intense."

b. Chronic Abscess first appears as an indistinct tumour, the fluctuation being more or less marked according to the distance from the surface. The inflammatory symptoms of

the acute variety are altogether absent, unless the disease be far advanced or accidentally irritated.

ABSCESS AND DISEASED BONE.—Chronic Abscess is sometimes a consequence of *Inflammation of bone*. This may be suspected whenever permanent inflammatory enlargement and tenderness exist, especially if it can be traced to an injury, and there is a fixed pain at one particular spot, which is increased at night. The long persistence of such symptoms, in spite of remedies, although there may be occasional remissions, almost certainly indicates the existence of a circumscribed Abscess in the bone, which often requires surgical measures for its relief and cure.

MAMMARY ABSCESS—gathered breast—is an accompaniment of that great functional change in the gland which is incident to lactation, most frequently at the commencement, and generally after the birth of the first child. It affects the tissue covering the gland, or that behind it, or the gland itself. The inflammation is attended by rigors, heat, acute lancinating pain, or deep-seated throbbing pain; the breast becomes swollen, red, and prominent, and there is much constitutional disturbance.

CAUSES.—Abscesses, with few exceptions, are indicative of constitutional debility, and are a frequent sequel of low exhausting fevers. Sometimes they result from blows, or from foreign bodies introduced into the skin or flesh — splinters, thorns, etc.

Diseased bone, as stated above, may cause Abscess, or inflammatory enlargement of a part.

EPITOME OF TREATMENT.—

1. *Before suppuration.*—Acon., Bell., Apis, or Merc. Lint saturated with a lotion of the same remedy as administered internally may be used locally.

2. *During suppuration.*—Hep.-S., Sil., Ars., Chin.

3. *After suppuration.*—Calc.-C., Chin., Ac.-Phos., Sulph., etc.

LEADING INDICATIONS.—

Hepar Sulph.—This remedy promotes the *suppurative process* in acute Abscesses, and is generally sufficient when the discharge is healthy. The local measures pointed out further on should be adopted.

Silicea. — Tardy, *long-continued,* or *unhealthy* discharge; chronic Abscesses and *Abscess of bone.* It facilitates suppuration, or moderates it when excessive.

Mercurius. — Painful Abscess, with copious discharge of thick matter; chilliness, with thirst, and *nocturnal aggravation of the pains.*

Belladonna.—Severe *pains, Headache,* and much constitutional disturbance.

Arsenicum.—Severe *burning pain,* with symptoms of general *vital depression;* Abscess having a gangrenous appearance, or discharging pus tinged with blood.

China.—Abscesses following prolonged disease; prostration, from *excessive discharge of matter or blood,* Diarrhœa, etc. It greatly sustains the constitution during suppuration.

Calcarea.—This remedy assists the healing of the Abscess after suppuration is completed, and the elimination of disease from the constitution.

Aconitum.—Well marked, *feverish* symptoms, during any stage of the disease.

Ac.-Fluor. and *Arn.* are also useful.

Local Treatment.—Abscesses arising from local injury should be freed from all sources of irritation, such as thorns, splinters, etc. Poultices (see Section 34) are valuable; they relax tension, and, consequently, relieve pain; if applied directly an Abscess begins to develop, a poultice will either disperse or restrict the formation of pus. If suppuration have proceeded too far to be arrested, poultices facilitate the progress of the pus to the surface and its ultimate expulsion. *Fomentations* with hot water, frequently repeated, are valuable adjuncts to poultices. Generally, when pain has subsided, a *water-dressing* should be substituted (see Sec. 35). *Spongiopiline* in some cases may be employed instead of a poultice.

Opening of Abscesses.—Acute Abscesses seldom require the lancet, especially when they point and become pyramidal without enlarging in circumference. The formation of an Abscess under strong fasciæ or ligamentous textures, which ulcerate with difficulty, requires an artificial opening to prevent the burrowing of the pus, and the setting up of great constitutional disturbance. When an Abscess occurs on an

exposed part, as the face or neck, and it is desirable to avoid the scar which generally ensues when it bursts spontaneously; or when it is so situated that it may discharge into some internal cavity—the chest or windpipe—an opening should be made. In the female breast, a puncture should be made as soon as there is fluctuation; and in the perineum or neighbourhood of the anus, an opening should not be postponed one hour. When an artificial opening is required, the operator should be certain that the knife enters the cavity of the Abscess to let out the pus freely, and that the opening is made where the matter tends to point, or at the most dependent part, or at a distance from any possible source of putrefaction. For those who dread pain even in the trifling operation here referred to, the use of local anæsthetic agents is recommended. If the part to be punctured is thick, and there is any possibility of its including an artery, Mr. Hutchinson says, "Never open the abscess by a plunge. Under such circumstances only divide the skin and fasciæ."

After an Abscess has been opened, and its contents discharged, the *Calendula lotion* (one teaspoonful of the tincture to three tablespoonfuls of water) greatly expedites recovery. It may be applied by saturating a piece of lint, or two or three thicknesses of linen, with the lotion, and covering it with oil-silk. The dressing should be renewed two or three times a day. The use of the carbolic spray, of carbolised silk sutures and dressings, is necessary in some cases, not only at the time of operation, but also in all subsequent renewals of dressings. Complete cicatrisation is the only sure test of the closure of the sinus. When chronic Abscess is consequent on caries of vertebræ, or Morbus Coxæ, the patient should be kept in bed six weeks after the closure of the Abscess. The long splint should also be retained for the whole time in the latter disease.

Diet and Hygiene.—As Abscesses are generally indications of debility, a liberal allowance of nourishing food is of great importance; it should include good animal broths, broiled mutton chops, chocolate or cocoa, and, in some cases, good beer or wine. Change of air, with residence by the sea-side or in the country, forms an important part of the hygienic treatment.

236.—Ganglion.

Definition.—A small swelling, composed of toughish cysts, formed on one or other of the tendons of the back of the wrist, rarely larger than a child's marble, generally smaller, attended with weakness, but free from pain.

Causes.—Excessive action of the tendon, or of the extensor muscle leading to the tendon to which the Ganglion is attached. Mr. Skey states that he has treated many cases in the persons of violin players, in whom the malady has been confined to the left hand, the right, or bow hand, being free; he states also that Ganglions are often seen in pianists who practise many hours daily. But they are not confined exclusively to this class of persons.

Treatment.—(1) Blows to rupture the sac, and cause its contents to escape into the surrounding tissues, are by no means uniformly, or even generally, successful. (2) Mr. Skey recommends the hand to be bent so as to tighten the skin over the cyst, and a lancet to be passed into the centre of the tumour, so that by a lateral movement of the instrument the contents may be evacuated; then, by kneading the part well, every drop should be removed. Afterwards, a thick compress of lint should be firmly strapped with plaster, and a roller applied. (3) The method, however, we recommend to be first adopted, suggested to us by Dr. Clifton, of Northampton, is the internal and external use of *Benzoic Acid;* 2 drops of the 2x dil. thrice daily. For external use, *Benzoic Acid,* gr. iij., Glycerine Cerate, ℥j.; to be well rubbed into the part morning and night. *Phyto.*, *Ruta* and *Mez.* are also efficient.

237.—Obesity (*Obesitas*)—Corpulence.

Definition.—The excessive accumulation of fat under the skin and around the organs of the body, so as to exercise a prejudicial influence on the health, usefulness, or comfort of the patient.

Diagnosis.—An excess of fat, locally or generally, is not a favourable condition for resisting disease. Adipose tissue, in

undue quantity, favours suppuration, and is often an impediment to the repair of an accident. Constitutional disturbances are badly borne, and circulatory and respiratory disorders tell most disastrously. In short, the very wheels of life are clogged.

Obesity may be said to exist only when fat is present in such large quantities as to disqualify the person for performing the various duties of life, by occasioning difficulty of breathing, panting on slight exertion, deranging the circulation, and causing various functional disturbances, with diminution of mental and bodily activity. The term *Corpulence* is restricted to cases in which the quantity of fat is not so great as to amount to positive inconvenience or discomfort.

Patients with an inclination to Corpulence usually present symptoms of hepatic derangement, as flatulence, constipation, drowsiness after meals; they lose appetite for solid food, and experience sinking sensations which render them averse to muscular exertion, and often lead to an excessive use of stimulants.

Causes.—Glycogen, it is thought, becomes changed into fat, and there is no doubt that ingested starch and sugar are converted into fat, while they increase the amount of glycogen in the liver. *Hereditary* tendency or constitutional predisposition, most probably due to the liver, as would be inferred from the foregoing remarks, can alone account for the excessive accumulation of fat in many instances. Some persons are naturally fat, others lean; some become corpulent on a moderate diet, others spare in the lap of luxury. These are matters of common observation, but of which we can offer no explanation. *Age* exercises considerable influence; children are usually fatter than adults; after the middle period of life, fat often accumulates in considerable quantities. In old age, however, the adipose tissue, and the fat it contains, generally diminish. *Race*, again, is an important element in the question. The Americans are remarkable for their leanness, and the Arabs are almost destitute of fat; Europeans, and especially the English and the Dutch, on the other hand, are proverbially fat; hence, John Bull is always pictured excessively corpulent.

Besides individual or accidental causes of Corpulence, the following circumstances directly influence the production of fat. *Food*, rich in hydro-carbonaceous matter; for while a certain amount of such food is necessary to maintain the temperature of the body, if it be taken in excess, such excess is often stored up as fat. Ease of mind and repose of body are conditions highly favourable to the formation and accumulation of fat; whereas anxiety, fretfulness, night-watching, etc., have a directly opposite effect. Thus science proves the truth of the adage—"A contented mind is a continual feast." A *comfortable temperature* is an important element in the production of corpulence; not that a high temperature directly engenders fat, but it is a condition favourable to the formation of fat, and one in which less is consumed.

Treatment.—The treatment of Corpulence, brought prominently before the public some years ago by the late Mr. Banting, in the simple story of his remarkable experience, proves that a proper diet is alone sufficient to remove the condition, with its long train of evils, without the addition of nauseous drugs, or of those active exercises which it is in vain to instruct unwieldy patients to take.

The chief feature in the *Banting dietary* is the exclusion of two elements—starch and sugar—from the ordinary food of a well-to-do gentleman:—*Bread* (except toasted, or the crust off a common loaf), *potatoes*, *sweet roots*, *butter*, *sugar*, *cream*, *beer*, *port*, and *champagne*.

These articles of food and drink contain starch or saccharine matter, and are the chief fat-producing elements in our dietary, and to relinquish them is to escape the thraldom of Corpulence. In one year, on this diet, Mr. Banting reduced his weight 46 lbs., and his bulk about 12 inches; at the same time his numerous corporeal infirmities were greatly mitigated or altogether removed. Seven years afterwards he wrote:—

"I can conscientiously assert that I never lived so well as under the new plan of dietary, which I should formerly have thought a dangerous, extravagant trespass upon health; I am very much better, bodily and mentally, pleased to believe that I hold the reins of health and comfort in my own hand."

The "*Plan of Dietary*" suggested in Section 2, with the sugar, butter, cocoa, superflous bread, potatoes, etc., eliminated from it, would meet the requirements of most corpulent persons admirably. A *Banting* diet cannot, however, be recommended indiscriminately.

238.—Old Age (*Senectus*); and Senile Decay.

Human life may be divided into three great epochs—the period of development, that of middle life, and that of physical decay.

Under the first division is included the whole time from birth up to about the twenty-fifth year, during which the vegetative organs and those of the lower animal life are consolidating. The central nervous system is more slow in reaching its highest development, and the brain especially is many years later in acquiring its maximum of organic consistency and functional power.

The middle period of life—between about the twenty-fifth and the forty-fifth year—is the time that the individual is subjected to the greatest pressure from external causes. The industrial classes are absorbed in the struggle for maintaining themselves and their families; the rich and idle are immersed in dissipation, or haunted by the mental disgust it excites. At the same time, the women are going through the exhausting process of child-bearing, and are either surrounded with the cares and duties of a poor household, or equally pressed with anxiety to attain positions for themselves and their children in fashionable life; or they are idle and heart-weary; or forced to an unnatural celibacy. Frequently they are both idle and anxious.

The period of decline may be said to commence when the first indications of distinct physical decay manifest themselves, and when a new set of vital conditions come into force. There are not, however, any sharp lines of demarcation between the epochs thus sketched; the one insensibly grows into its successor.

Youth and Age.—Although the activity of the growth of

the organs in childhood and youth offers a striking contrast to their decline in old age, there is, notwithstanding, a resemblance in the diseases of the two extremes of life, like the tints of the rising and setting sun. Infantile Convulsions, and senile Convulsions; infantile Diarrhœa, and senile Diarrhœa; infantile Eczema, and senile Eczema; uric acid deposits in childhood, and uric acid deposits in age, may be adduced as illustrations of the resemblance of the diseases affecting the two extremes of life. In the early period, the constitution has not acquired its vigour; in the closing, it is losing it.

To the mere worldling, old age is repulsive. But when life has been spent wisely—errors corrected, the heart disciplined, and the intellectual and moral powers are in the ascendant—old age—moderated, chastened, elevated—presents a spectacle happily described as a "crown of glory." A human being who, after fulfilling all the duties of life, is still living in a "green old age;" whose "eye is not dim, nor his natural force abated," thus ripened for the future, may well command our admiration and veneration.

A brief reference to the changes and dissolution of man's material frame will form an appropriate conclusion to this portion of our work.

The decay of nature is *gradual*, and does not affect all the structures of the body equally at the same period; it also begins in some at a comparatively early, and in others not until a considerably advanced period of life. The following are illustrations of the changes attendant upon old age, and they exercise an important influence in accelerating that final one which is the common lot of humanity.

I. The Bones.—As old age advances, the bones undergo very characteristic changes. In infancy and childhood, the *animal* element predominates; hence we can explain why the bones are then so pliant and fractures so rare. In adult life, the relative proportions of bone may be approximately stated as consisting of one-third of animal and two-thirds of earthy matter. In advanced age, the earthy matter is in excess. This alteration in their composition renders the bones extremely brittle and liable to fracture. Fractures are then more oblique

and comminuted, and less apt to unite firmly again, than those occurring at an earlier age.

II. The Muscles.—The minute cells, aggregated in the form of fibres, of which the muscles of the body are composed, are rapidly destroyed by the contraction of the muscles; but in vigorous life, by the digestion and assimilation of food, they are as rapidly reproduced. In old age, on the contrary, the disintegrated cell-tissue is but tardily repaired, and the muscles become soft, flabby, and pale from an insufficient supply of blood; they are consequently unequal to severe or protracted exertion; and, as there is no reserve of tissue, muscular debility is easily occasioned, and the strength is but slowly and imperfectly restored. The tendinous portions of the muscles are also liable to earthy deposits in them; thus their resisting forces become weakened, and they are in constant danger of rupture if subjected to any undue tax.

III. The Heart.—Another most important and frequent change is one that takes place in the textures of the central organ of circulation. The heart becomes weakened from senile softening, and degeneration of its muscular structures into fatty tissues; its pulsations are thus rendered less and less efficient to propel the blood to the extremities. The blood failing to complete its circuit, the hands and feet become cold, and the decline of temperature gradually extends to the central organs of the body. This reduced power of the heart, with the disposition to *atheromatous* deposits in the coats of the blood-vessels, referred to in the next paragraph, with subsequent ossification of the valves of the heart, is one of the most common and fatal changes attendant upon old age. These changes as they proceed are generally hidden and painless.

IV. The Blood-Vessels.—In the silent progress of years, the arterial system is liable to undergo changes which are incompatible with the performance of its important functions. The arteries gradually become converted into ossific or bony patches, of greater or less extent, often so considerable as to lead to changes of a vital character by destroying the elasticity of the arterial tubes, and deranging the circulation of the blood in the parts to which they conduct. Thus the nutrition of the

body is impaired, and the functions of the nervous and muscular systems are only imperfectly performed. Further, the ossific patches in the coats of the arteries may lead to their rupture, or become causes of Aneurism, Gangrene, Apoplexy, etc., forms of disease to which the aged are especially liable. Apoplexy, thus occasioned, is one of the most frequent causes of death in old age. The cerebral arteries become diseased, and as the blood is driven into them, they give way. Even thin persons, whose vessels and heart are diseased, may die from Apoplexy.

Ossification of the coats of the arteries, and fatty degeneration of the heart, usually occur at the same time of life, and the one condition, happily, counteracts the consequences of the other. The life of an aged person would be in far greater jeopardy, if, while the walls of his arteries were decaying, his heart retained all its original force. As it is, however, the loss of resisting power which is natural to the coats of the arteries, finds its counterpart in the fatty metamorphosis of the muscular tissues of the heart.

V. The Vertebræ.—The changes in the spinal column are very considerable; they alter the external form of the body, and more or less derange the functions of the chief organs. The three graceful curves in the spine, so exquisitely arranged, both to give space and protection to the internal viscera, and for the transmission of the weight of the head and trunk in the line of gravity, become more or less obliterated in advanced life, and the centre of gravity disturbed. The vertebral column also loses its *elasticity;* the disc of cartilage placed between the successive vertebræ, to break the force of shocks and prevent jarring of the brain, partly disappears or ossifies; the mobility of the spine is diminished, and its muscular supports enfeebled, and thus a false step or a trifling accident may be converted into an occurrence of grave importance. The alteration in the curves of the spine produced by the above causes, gives that change to the *external form* which is so characteristic of old age. Corresponding with these changes in the spine, as affecting the external form, are others which affect the bones generally. Owing to the diminished size of the muscles, and the absorption of fat beneath the skin, points of

bone in various parts become more angular and prominent, and the limbs lose that graceful and rotund form which was the pride of earlier years.

VI. The Eyes, etc.—The special senses, as those of sight and hearing, frequently, and sometimes at a comparatively early period, give evidence of approaching decay. The *Arcus Senilus*, a circumferential opacity of the cornea, resulting from fatty degeneration, and generally associated with a like degeneration of the heart, is, as its name implies, an affection incident to the aged. *Cataract*—opacity of the crystalline lens, or its capsule, or both—seems to be the consequence of impaired nutrition, and is met with in elderly persons only, except as the result of inflammation or injury. But the most frequent cause of impaired or perverted vision is alteration in the form of the lenticular bodies of the eye—the cornea and the lens—which, losing their natural convexity, interfere with the correct impressions on the retina at the proper fixed point of the object of vision.

Defective hearing is another not infrequent attendant upon old age, and may result from various causes, the most frequent being impairment of the acoustic nerve.

VII. Mental Faculties.—Associated with these important physical changes, the mental faculties partake of the general deterioration. That the mind retains its vigour and clearness of perception, while the body undergoes decay, is a poetic fiction; the brain shares inevitably in the physical disorganisations we have noted. This is proved by the effects of disease. During recovery from wasting diseases, especially from those in which the phosphates have been carried off without a corresponding reproduction, the exercise of the brain is not only difficult but dangerous, and it has not unfrequently happened that death has resulted from complete breakdown of the nervous system through too early mental work during convalescence.

Gradual Decay.—The various forms of man's decay are gradual and progressive. Death may take place suddenly from Heart-disease, Apoplexy, rupture of an Aneurism, etc.; but it is only the *termination*, not the disease, that is sudden. For years before the fatal issue, the organ was undergoing degeneration of structure. Death under such circumstances has been

compared to the fall of towering cliffs, which crush everything beneath. The catastrophe is terrible, and occurs unexpectedly; but it was the slow disintegration of many preceding winters' frost that hurled it down the steep. Sudden death is a misnomer in language, except as it takes place from accident or poison.

By the use of the *ophthalmoscope* the character and extent of brain and nervous degeneration can often be detected. (See Section 112.) Several cases have been recorded in the medical journals from practice, in which the Atrophy of the optic nerve was found to accompany disease of the central nervous system. The detection of the particular form of decay from which the life of an aged person may be jeopardised is valuable, not merely for the sake of diagnosis, but because it often affords a clue to the direction treatment should take.

Winter and Senility.—The climatic conditions of winter are highly favourable for the discovery of all kinds of weaknesses and tendencies to organic disease, especially of the brain, heart, blood-vessels, kidneys, and liver. Facts on a large scale prove that defects in these organs manifest themselves most frequently and severely in cold weather. The whole constitution is lowered by the conditions of winter, and, to an extent, devitalised; and Medicine can only exercise an indirect power over these conditions, by prescribing such remedial or preventive measures as we have suggested in this Section—artificial heat, clothing, food, etc., to forestall, if possible, the effects of cold, and to counteract any of the organic leakages we have enumerated.

Premature Old Age.—In alluding to the decay of nature, we may add that we refer rather to the vital decay of individuals than to the mere lapse of years; vital conditions cannot always "be measured by number of years." It is well known that some persons at fifty, or even earlier, are in this respect older and more shattered in constitution than others who have attained the age of seventy or upwards.

Our present manner of life, business haste, and anxieties, tend to induce premature decay. Probably as the result of improved sanitary measures, of a more correct and general recognition of the laws of health, and of the rapid spread of

Homœopathy, the attainment of a vigorous old age without the premature feebleness and decay hitherto so generally observed, will be more common.

Modes of Dying.—Diseases terminate fatally in one or two ways: either by suspending the heart's action, called *Syncope*, or by interrupting the function of breathing, called *Asphyxia* or suffocation.

1. Death from Syncope may arise from an insufficient supply of blood to the heart, as from a sudden copious hæmorrhage, or from more slowly acting causes, as deficient food, or defective assimilation. This is *Anæmia*, and its symptoms are dimness of vision, dilated pupils, vertigo, restlessness, a slow and feeble pulse, pallor of the face and lips, coldness of the extremities, cold sweats, irregular gasping respiration, and, finally, insensibility, with or without convulsions. If the heart is examined after death, it is found nearly or quite empty, and contracted.

Death from Syncope may also arise from failure of the contracting power of the heart, as occurs in Pericarditis, Peritonitis, and in some forms of poisoning. This is *Asthenia*, and the symptoms are—quick, feeble, or imperceptible pulse, cold extremities, and clammy sweat of the general surface, the intellect usually remaining clear to the last. After death, the right cavities of the heart may be found full of dark blood while the left are distended with red blood.

II. Death from Asphyxia may result in three different ways. First by obstruction to the entrance of air into the lungs, as in drowning, strangulation, œdema of the glottis, Croup, etc. The change of venous blood into arterial in the pulmonary capillaries is stopped, while the unchanged blood circulating in the arteries paralyses the nervous system. This is *Apnœa*. The symptoms are—quickened, laboured breathing, violent action of the auxiliary muscles of respiration, protruded eyeballs, swollen and livid countenance, distention of the veins of the neck, and soon, loss of consciousness, often with muscular twitchings or convulsions. The heart and arteries continue to beat after breathing has ceased, and if the lungs are examined after death, the right cavities are found distended with dark blood, but the left are empty.

Secondly, the nervous system may be primarily at fault

from structural disease in the brain, or of the circulation through that organ of poisoned blood, as happens in Uræmia and various specific fevers; a state of stupor, or insensibility to external impressions, is induced, the *medulla oblongata*, and through it the nerves of respiration, are paralysed, the respiratory movements become embarrassed, and, finally, entirely cease. This is *Coma*. As in Apnœa, the blood is not aërated, and similar consequences ensue. But there is this difference: the mechanical movements of respiration suffer before its chemical functions, and the brain is primarily affected, and the lungs secondarily. In Coma, loss of consciousness precedes difficulty of breathing, and the respirations become slow, irregular, and stertorous from diminished sensibility.

Thirdly, death from Asphyxia may be occasioned by blocking of the pulmonary artery, and, in consequence, stoppage of the supply of blood to the lungs. A fibrinous clot is carried into the pulmonary artery, and suddenly and completely arrests circulation in the lungs, or if the obstruction is incomplete, the patient may survive for several hours. This is *Embolism*. The symptoms are extreme dyspnœa, coming on suddenly, with pallor and faintness.

Treatment of the Aged.—There are many ailments peculiar to the approach of old age which require special medical treatment, or the application of particular measures, in which we are often rewarded for the timely use of appropriate remedies, and the prompt employment of judicious means, by seeing the flickering flame rekindled, and valuable life considerably prolonged. On two or three points only can we make some general observations.

1. Food.—Food should be of a much less solid form than during the vigour of adult life. Just as nature provides fluid food during infancy before the teeth appear, so the loss of teeth, a common attendant upon old age, necessitates a return to a form of food that does not require mastication. Inattention to this point is, we believe, one of the most fruitful causes of the impaired digestion, weakness, and sufferings of the aged. Frequently, artificial teeth cannot be tolerated, and the only path of safety lies in the adoption of an almost exclusively fluid diet. We have had many cases under care in which our

advice on this point has been carried out with the most beneficial results.

2. Rest.—This is essential to the health and safety of the fragile frame of the aged. The sports and exercises of youth, or the exertions of maturer age, would fracture the bones, rupture the tendinous portions of the muscles, or occasion a blood-vessel to give way. To the aged, long-continued exercise and too little rest are highly unfavourable, the reparative processes being only slowly performed. Happily, the activities and athletic exercises of youth become distasteful to old persons, and the burdens of mid-day life are transferred to the succeeding generation, and they now seek and enjoy a condition of quiet and repose necessary to their present well-being.

3. Warmth.—In the winter season, when sudden changes of temperature are frequent, provision should be made for preventing the ingress of the cold early-morning air, and for maintaining a suitable temperature in the bedroom through the whole night. The temperature of the sleeping apartment should be from 60° to 62°, measured by a thermometer, as personal sensations are not a sufficient guide. It no doubt often happens that the lonely encounter with death takes place in the stillness of the hour before sunrise, from a sudden access of cold air which the extreme feebleness of old age could not resist or endure. As before stated, cold seriously affects the aged, and it is a fact which excites frequent observation, that, soon after the setting-in of severely cold weather, the obituaries in the public papers of persons in advanced life become unusually numerous. The severity of the frosts of the early portion of winter proves fatal to many aged persons, whose easy fall resembles that of the autumnal leaves. "An aged man, with a sluggish heart, goes to bed with a temperature say of 50° to 55°; in his sleep, were it quite uninfluenced from without, his heart and his breathing would naturally decline. Gradually, as the night advances, the low wave of heat steals over the sleeper, and the air he was breathing at 55° falls, and falls to 40°, or it may be 35° or 30°. What may naturally follow less than a deeper sleep? Is it not natural that the sleep so profound shall stop the labouring heart? Certainly. The great narcotic never travels without

fastening on some victim in this wise, removing them, imperceptibly to themselves, into absolute rest—inertia—until life recommences out of death."

That the *coldest portion of the twenty-four hours, and also the period of minimum vitality, is just before daybreak*, is a fact full of warning to the aged and to the feeble generally. How often has it been observed that the setting-in of grave or immediately fatal symptoms has coincided with this daily recurrence of cold! When nature, refreshed by sleep, is summoning new energies in the young and robust to meet the exigencies of the coming day, the aged and infirm succumb in the greatest numbers to a depression which has been too deep and too prolonged to admit of any rallying. This fact gives force to our recommendation of striving, by keeping bedroom fires brightly burning, and by administering timely support at this juncture, to neutralise as far as possible the consequence of this low-temperature wave. Common sense is by some invoked to show the unsuitableness of taking nourishment during the night; but such persons forget that if they forego their wonted rest at pleasure's call, they endeavour by food to repair the drain upon the system from the exciting dance or evening entertainment, before retiring. Will not common sense equally show that the invalid whose unrest is, perhaps, intensified by bodily or mental distress, needs nourishment to tide him over the period of greatest exhaustion? Persons in health may be able to take sufficient food at a time for ten or twelve hours; but such a practice would be out of the question with the old or the invalid.

"With regard to the effects of temperature in inducing or averting disease, we note that such diseases as Bronchitis and Pneumonia diminish as the temperature of the year advances; that, on the contrary, Diarrhœa is aggravated by heat, and that Apoplexy less frequently occurs in the summer than the winter months; and that Epileptic seizures, Paralytic strokes, and sudden deaths generally, are often registered during the prevalence of hail and snow storms, with the accompaniment of high winds; the cause simply being due to the fact that warmth favours the superficial circulation, and the inhalation of warm air soothes the mucous surfaces of the air tubes, whilst cold, by driving the blood to the internal organs, produces congestions that lead to Apoplexy in weakened brains, and to fatal Syncope in weakened hearts. We have been asked many a time by patients whose brains suffer from congestion, and whose hearts are weak, whether they might take a drive in the open-air on clear, cold,

frosty winter days, and we have invariably advised them to keep in warmth and comfort by their own firesides; we believe that such advice has lessened the risk of an Epileptic seizure, or a fainting attack, that ends with sudden death. There is a wide-spread idea that extreme cold is a healthy tonic for everybody; but we must beg for an exception to be made in favour of the very old and the very young, inasmuch as in both cases the vital powers are weak; the extreme cold being a great depressant, both old and young must inevitably suffer from its effects unless properly protected. Warmer clothing, and warmth-producing food, should therefore be the fitting antidotes to cold, together with the judicious, rather than the unlimited, use of exercise in the open air."—*Homœopathic Review.*

A regulated temperature in his apartment, heat-producing kinds of food, given at short intervals both by day and *night*, warm clothing, and other kindred measures, should therefore be adopted in the treatment of the aged.

4. Medicines.—On this point we can offer no definite suggestions. The selection of remedies must be determined strictly according to the symptoms the patient may present, modified by any idiosyncrasy of constitution. They are, however, very frequently of the greatest use. Old persons may be preserved in a really comfortable existence for a considerable period by the administration of such medicines as *Dig.*, *Ars.*, *Phos.*, *Nux V.*, *Podoph.*, *Ac.-Nit.*, *Ac.-Phos.*, *Ferr. Phos.*, etc.

Thus the physical frame decays, and man passes away, death terminating the journey of life, and the traveller welcoming the long repose as he had often welcomed sleep after the fatigues of the day. We have reason to believe that dying is often as painless as falling asleep. Persons who have been resuscitated after drowning, and after all sensation had been lost, have asserted that they experienced no pain. What is often spoken of as the *agony of death* is probably purely automatic, and therefore unfelt. The idea embodied by the poet in the following lines is literally true—

> "Passing through nature to eternity,
> The sense of death is most in apprehension."

There is, thus, beneficence in man's decline just as in his growth and maturity, and there is also design. The Christian philosopher not only submits with resignation to the decay of

his material form, but rejoices in the assured hope that so perfect and highly endowed a structure, teeming with evidences of beneficent design, has not been constructed merely to rise, flourish, and then to disappear without a future grand result, commensurate with so costly an expenditure of wisdom and goodness. INFINITE WISDOM, which designed and called man into being, would, it seems, forbid that such a creation should be comparatively vain, leaving only a dark blank as the memorial of his existence. In the dissolution of our mortal fabric we but trace its relationship to organic and inorganic nature, which is a succession of ceaseless changes. From the sun and stars, whose constitution the spectroscope has in recent years wonderfully revealed, to the grain of sand which is washed from the face of the surf-beaten rock to form again part of the bulwark of a distant shore—from the giant of the forest down to the tiny lichen in the cleft of the wall—from the leviathan of the deep down to the minutest monad—all are undergoing the same round of constant transition. Throughout the universe, as in the microcosm of man's body, the laws of disintegration and decay are balanced by those of reproduction and supply. Individuals, species, genera, all pass away, and are replaced by others. Man's brain, the highest organised machine, itself follows the universal law; but man himself is not thus mutable. The *ego* is one and the same, from the moment it first sprang into existence. That it exists unchanged by the ceaseless changes of the physical organism to which it is linked, is surely evidence that it is independent of matter, and that it will survive when the present order of nature has passed away (*S. Wood*).

Death, then, is really but a transitional process by which the link which binds man to an earthly form is broken, and through which the good pass from a probationary and transient state of existence to one that is pure and immortal.

"The Sun is but a spark of fire,
A transient meteor in the sky;
The soul, immortal as its sire,
Shall never die."

CHAPTER XIII.

ACCIDENTS.

239.—Asphyxia (*Asphyxia*)—Apnœa (from Drowning)—Suffocation.

DEFINITION.—The term *Asphyxia* is generally used to express the effects of interrupted respiration, as in the case of drowning, hanging, a stroke of lightning, or breathing noxious vapours.

SYMPTOMS.—There is no breathing, or action of the heart; the eyelids are generally half-closed; the pupils dilated; the jaws clenched; the fingers semi-contracted; the tongue appearing between the teeth, and the mouth and nostrils are covered with a frothy mucus. Coldness and pallor of surface increase.

TREATMENT.—Not a moment's time should be lost. The patient should be attended to immediately, on the spot, while remedial aids are being fetched. All mere spectators and useless helpers should be sent away, as the admission of abundance of pure air to the patient is of first importance. When a drowned man is taken from the water, he should be first turned on his face to allow of the escape of water from his mouth and throat. Artificial respiration should be then attempted.

The directions for restoring the apparently dead, recommended by that noble organisation, the Royal Humane Society, are so concise and complete, that we cannot do better than reproduce them, with a few alterations.

The points to be aimed at are—first, and immediately, the RESTORATION OF BREATHING; and secondly, after breathing is restored, the PROMOTION OF WARMTH AND CIRCULATION.

TREATMENT TO RESTORE NATURAL BREATHING.

Rule 1.—*To maintain a Free Entrance of Air into the Windpipe.*—Cleanse the mouth and nostrils from dirt, saliva, etc.; open the mouth; draw forward the patient's tongue, and keep

it forward: an elastic band over the tongue and under the chin will answer this purpose. Remove all tight clothing from about the neck and chest.

Rule 2.—*To Adjust the Patient's Position.*—Place the patient on his back on a flat surface, inclined a little from the feet upwards; raise and support the head and shoulders on a small firm cushion or folded article of dress placed under the shoulder-blades.

Rule 3.—*To imitate the Movements of Breathing.*—(See engravings.) The operator, standing or kneeling behind and at the head of the patient, should grasp the patient's arms just above the elbows, and draw the arms gently and steadily



I. INSPIRATION.

upwards, till they meet above the head (this is for the purpose of inspiration, or drawing air into the lungs), and keep the arms in that position for two seconds. He should then turn down the patient's arms, and press them gently and firmly for two seconds against the sides of the chest (this is with the object of pressing air out of the lungs,—expiration).

If an assistant compress with both hands, flat, the lower part of the ribs and diaphragm, when the patient's arms are turned down, the expiration will be facilitated. The operator and assistant must carefully act together.

As the process of artificial respiration is laborious, the best qualified assistants should be selected to take turns with the

operator ; but changing places must be rapid, that not a single respiratory movement may be missed.

Repeat these measures alternately, deliberately, and perseveringly, fifteen times in a minute, until a spontaneous effort to respire is perceived, immediately upon which cease to imitate the movements of breathing, and proceed to INDUCE CIRCULATION AND WARMTH according to Rule 5.

Should a warm bath be procurable, the body may be placed in it up to the neck, *continuing to imitate the movements of breathing*. Raise the body in twenty seconds in a sitting position, and dash cold water against the chest and face, and



II. EXPIRATION.

To illustrate the position of the Body during the employment of this Method of inducing respiration.

pass ammonia under the nose. The patient should not be kept in a warm bath longer than five or six minutes.

Rule 4.—*To excite Inspiration.*—During the employment of the above method, excite the nostrils with snuff or smelling-salts, or tickle the throat with a feather. Rub the chest and face briskly, and dash cold and hot water alternately on them.

The efforts to restore life must be persevered in until the pulse and breathing have ceased for at least an hour. For well-attested instances of resuscitation are on record, after several hours of suspended animation.

Another method of effecting artificial respiration is by

catheterism of the trachea. "The operator inflates from his own chest; but as he is able to drive in much more air than is absolutely necessary, its impurity is of no great consequence. An assistant must empty the patient's lungs by compression of the thorax between the insufflations."—*Shaw's Medical Remembrancer.*

Treatment after the Restoration of Natural Breathing.

Rule 5.—*To induce Circulation and Warmth.*—Wrap the patient in dry blankets and commence rubbing the limbs upwards, firmly and energetically. The friction must be continued under the blankets or over the dry clothing.

Promote the warmth of the body by the application of hot flannels, bottles or bladders of hot water, heated bricks, etc., to the pit of the stomach, the armpits, between the thighs, and to the soles of the feet. Warm clothing may generally be obtained from bystanders.

On the restoration of life, when the power of swallowing has returned, a teaspoonful of warm water, *small quantities* of warm wine, warm brandy-and-water, or coffee, should be given. In some cases, an enema of beef-tea and brandy is to be preferred to administration by the mouth. The patient should be put into a warm bed, in a room well ventilated, and encouraged to sleep. Great care is requisite to maintain the restored vital actions, and at the same time to prevent undue excitement.

In cases of *Suffocation from Hanging*, the treatment is much the same, after the body has been cut down, and the ligature removed from the neck.

When a *Stroke of Lightning* has produced Asphyxia, the body should be dashed for ten or fifteen minutes with abundance of cold water to promote reaction. The body should also be diligently rubbed. But artificial respiration should be resorted to. A current of electricity passed through the chest, from breast to back, may prove beneficial.

240.—Depression from Cold.

Long exposure to severe cold, with accompanying wind, rain, or sleet, proves a formidable sedative; although when reaction is perfect, cold, in a moderate degree, exerts an invigorating and bracing influence upon the system.

Symptoms.—Stinging pain, followed by numbness and insensibility. Pallor, rigidity of the muscles, especially those of the face and extremities, torpor, heavy sleep from which the person is with difficulty aroused, suspension of the vital functions. These effects are the most readily produced in the old and infirm, in persons who are debilitated by disease or overexertion, in the intemperate, and in very young infants.

Treatment.—This must be regulated by the degree of depression. While a fair pulse and consciousness remain, warmth should be applied, very cautiously and gradually. But if there be apparent death from cold, and the patient's limbs are rigid, he should be covered with snow to the depth of several inches, his mouth and nostrils only being left free. The melted snow should be replaced by fresh. If no snow be available, an iced salt bath for a few minutes may bring reaction. Where the limbs are less rigid, the clothing should be removed, and the whole surface of the body briskly rubbed with snow or iced water until the pallor of the skin yields to redness. The rubbing should then be continued with dry flannels; and presently the patient may be wrapped in a dry blanket and placed in a cool bed in a cool room. Injections of tepid, camphorated water will promote revival; and as soon as the patient can swallow, *Camphor* should be administered. Ultimately, warmth may be very gradually applied.

In cases of suspended breathing, artificial respiration should be resorted to. (See previous Section.)

Remedies.—*Carbo V.* will relieve the severe pains of vital reaction. *Secale* will counteract local mortification.

241.—Concussion of the Brain (*Concussio cerebri*).

Definition.—An interruption to the functions of the brain, from a blow or other mechanical injury of the head; it

may vary in degree from a slight stun to extinction of life.

Concussion presents three stages: 1. Often a *short* period of collapse. 2. A reactionary, or somnolent stage, lasting many days. 3. Convalescence. The insensibility can throughout be shaken off; indeed, the patient rouses himself occasionally.

Symptoms.—Insensibility, generally incomplete, and resembling that of fainting rather than Apoplexy; pale face; small or imperceptible pulse; stertorous breathing; cold extremities; etc. By shaking the patient, or calling his name loudly in his ears (which, however, should never be done), he may give a surly answer, and soon become insensible again. After a time, longer or shorter according to the severity of the injury, reaction comes on, and consciousness returns, often with vomiting. At first the reaction may be imperfect; it is often several days or even weeks before the power of the mind is restored.

Complications.—In many instances, fracture of the base of the skull, or cerebral laceration, are indicated by special symptoms. Active measures should not be taken until all uncertainty is removed by a full development of symptoms. The head should be shaved, and if a fracture, with or without depression, be discovered, and the symptoms are urgent, it may be necessary to trephine in order to remove extravasated blood.

Differences between Concussion of the Brain and Compression.

CONCUSSION.	COMPRESSION.
1. The patient is capable of being roused, and the pupils continue to act.	1. Complete insensibility, motionless pupils.
2. The breathing is seldom stertorous.	2. Usually so.
3. No retention, nor incontinence of urine.	3. There may be either.
4. No interval between the accident and the appearance of the symptoms.	4. Symptoms frequently do not immediately follow upon the cause.

Treatment.—*Arnica.*—Place two pilules upon the tongue, or moisten it with a few drops of the tincture by means of a

feather or quill, and repeat the dose every hour for several times.

Aconitum.—Should be administered alternately with *Arnica* if fever attend the return of consciousness. But if there be danger of cerebral disturbance—headache, flushed face, or other head symptoms—*Acon.* and *Bell.* should be alternated. *Opium.*—Stertorous breathing; constipation remaining after Concussion. *Hyos.*—Delirium, low or furious. A dose every one, two, or three hours.

General Treatment.—The patient should be placed in a warm bed, with his head at first moderately low, and warmth applied to his extremities and axillæ. On no account should he be induced to eat or drink; he must also be kept very quiet, and no attempt made to arouse him. If depression be much prolonged, or rallying incomplete, mild stimulants such as Ammonia will be necessary. In extreme cases the early use of stimulating enemata may ward off impending death. But great firmness and decision are often requisite to combat the urgent demands of the uninitiated for less expectant measures than will alone be suitable in many cases. When reaction comes on, the head and shoulders should be raised a little, and cold evaporating lotions applied, the patient being kept in a cool, quiet room, with the light modified, and noise and conversation shut out. He must be under care for two or three weeks, or even longer, lest some insidious inflammation of the brain should follow.

242.—Burns and Scalds (*Ambusta*).

Definition.—An injury produced by radiated heat from any hot body, or by the direct contact of hot solid, liquid, or gaseous substances.

Varieties.—(1) The *Erythematous*, producing mere redness, and soon terminating in resolution; (2) the *Vesicated*, in which the inflammation leads to the exudation of serum and the formation of vesicles, which, in slight cases, soon dry up and heal; or if the skin has been much injured, may be succeeded by obstinate ulcers. (3) The *Gangrenous*, from destruction of

the tissues. This variety, although usually exempt from pain, is by far the most serious.

The constitutional disturbances, and the periods of danger consequent on deep burns, have been divided into three stages: 1. Depression and congestion during the first four or five days; 2. Reaction and inflammation, in which the patient may sink with an affection of the head, chest, or abdomen; and, 3. Suppuration and exhaustion, which may continue from the second week to the close, and is often associated with Hectic, or Pleurisy. The danger of burns often depends more upon their *superficial extent* than upon the depth of the injury. *Burns on the trunk, head,* or *neck* are far more perilous than those of an equal extent on the extremities. Children appear to suffer much more severely from burns than adults.

Treatment.—A most important object to be obtained is to cover the injured part with some suitable material that shall *exclude atmospheric air;* and this covering should not be removed till the cure is complete. In dressing an extensive burn or scald, it is well to avoid exposing the whole at one time. And, as the cuticle forms the best covering for the injured part, it should if possible be kept entire; therefore any tension arising from blisters should be left to subside without puncturing them. The following are the local applications recommended:—

1. *Carbolic Acid and Olive Oil.*—One part of the *Acid* (as prepared for medicinal uses) to six parts of *Olive Oil,* is found to be invaluable in most cases, slight or severe. It is cleaner, more easy of application, and more soothing than most other remedies. The layer of lint put on at first should not be removed, but should be kept saturated by the removal of outer layers from time to time. When the wound is healed, it is easily and comfortably dispensed with. As a domestic remedy, it is recommended to be always kept ready for Burns and Scalds, just as *Arnica, Calendula,* etc., are kept ready for other kinds of accidents. *Linseed Oil* and *Lime Water,* equal parts, applied in the same manner as *Carbolic Acid,* is also a valuable dressing.

The application of a lotion of *Urtica Urens* (twenty drops of the tincture to an ounce of water) in the simplest cases, or

of *Cantharides* (ten drops of the tincture to an ounce of water) when blisters are forming, by means of cotton wool, is of great service. *Kreas.* is also sometimes useful.

2. *Soap.*—White or brown soap moistened in water, and rubbed on a piece of linen till the soap forms a coating on the linen as thick as a shilling, and larger than the wound it is intended to cover, so that it may the more perfectly exclude the air, is a handy and effective remedy.

3. *Flour or Starch.*—One of these may be used as a substitute in the event of either of the above not being at hand. Wheaten flour or finely-powdered starch should be uniformly and thickly applied by an ordinary dredger, so as to form a thick crust by admixture with the fluids discharged from the broken surface, thus excluding the air; and should be repeated when any portions fall off. Flour is, however, inferior to *Carbolic Acid*, and its after management is more difficult.

4. *Treacle.*—Common treacle is also recommended for recent burns or scalds.

The points of greatest importance are *immediate application* of the local remedy, complete *exclusion of atmospheric air*, and *infrequent* changing of the dressings, which is only necessary when they have become loosened or fœtid from the discharges. A *complete* change of dressing often causes pain, depression, and the detachment of portions of the new skin, and so retards the cure.

When, after the removal of the first dressing, ulcers exist, *Calendula* or *Glycerine* cerate, or a mixture of *Urtica Urens* and *Olive Oil* (one part to six), is a suitable application. Any discharge should be carefully removed, and the parts kept as clean as possible.

Internal treatment, except in slight cases, is always necessary, and must be suited to the injured part, its extent, and the constitutional symptoms present. As a general rule, *Aconitum*, early, does good, by allaying febrile symptoms, mitigating pain, and *moderating reaction*. *Kali Bich.*, deep burns. *Arsenicum* is valuable if ulcers form, or if the burn presents a *gangrenous* appearance. *Secale* and *Carbo Veg.* are also useful in the latter condition. In cases of great depression, the aid of stimulants, as hot brandy-and-water, ammonia, or ether, may

be necessary to induce reaction; but they should not be continued too long, as congestion of the head or chest, or aggravated fever and inflammation, might result.

243.—Contusion (*Contusum*)—Bruise.

Definition.—An injury inflicted on the surface of the body by mechanical violence, without laceration of the skin. It may be slight, involving only the rupture of minute *subcutaneous* blood-vessels, and perhaps the tearing of some muscular fibres; or a large blood-vessel may be torn; or even disorganisation of the tissues beneath the skin may be caused, as from the dull force of a spent cannon-ball. The remarkable properties of elasticity and toughness possessed by the skin often permit serious damage to its underlying structures while it remains entire.

Causes.—A blow from a hard, blunt body; forcible pressure, as of a wheel passing over a limb and crushing it; or reactionary force, as when the hip-joint is contused by a person's falling on his feet from a height.

Treatment.—In the less severe form of bruises, the object should be to excite, as speedily as possible, the absorption of extravasated blood. To this end the bruised part should be raised, and a *warm Arnica* lotion (one part of the strong tincture to ten of water) *immediately* applied by saturating lint with the lotion, and covering it with oil-silk, to exclude the air. The value of this application is undoubted, and happily is now becoming generally recognised. If the patient have a predisposition to Erysipelas, *Hamamelis* should be used instead of *Arnica*. In contusions, involving glandular structures, as the female breast, *Conium* is recommended; or when the covering of bone, as of the shin, is involved, *Ruta*. *Bellis* of the female breast. *Hypericum*, injury to the spinal cord, or parts rich in nerves, fingers, toes, etc. Also a lotion of equal parts *Hypericum* ϕ, *Spirit of Wine*, and *Distilled Water*. When in the neighbourhood of important parts, as the eye or a joint, inflammation may be warded off by applying ice, and administering *Acon.* internally. When pain or tenderness has

subsided, a bandage should be applied; and to remove swelling from extravasated blood, and to restore tone, a cold douche followed by warm friction is beneficial, as is also a saturated solution of salt in water. Leeches or punctures, where there is any chance of procuring absorption by other means, should never be resorted to, as air would thus be admitted to the part, and suppuration set up.

Ecchymosis.—This is discoloration of the skin following a bruise, and is produced by extravasated blood under the skin. It is first of a reddish colour, but speedily becomes black. During recovery, the parts change, first to a violet colour—the line which defined the bruise becoming indistinct—afterwards to a green, then yellow; and thus, sooner or later, according to the health of the individual, or the quantity of blood poured out, the discoloration disappears. *Black-eye* is a common instance of *Ecchymosis*.

Arnica lotion has great power in *preventing* this condition if used *immediately* after an accident. When extravasation has already occurred, *Hamamelis* lotion (one part to six of water) is more appropriate.

The application of ice will also assist the removal of the disfigurement.

244.—Sprain (*Stremma*)—Strain.

Definition.—An overstretching of the ligaments and tendons, generally with a rupture of some of the fibres.

Treatment.—When possible, treatment should be adopted *immediately* after the accident, otherwise the results may be very troublesome, causing much pain, and prolonged incapacity. This is especially likely to be the case when the knee, ankle, or hip is involved. In some cases, even caries, or anchylosis, results. If Hernia should result from lifting or spraining a part, the Section (177) on that accident should be consulted.

In the first place, the injured part should be immersed in, or fomented with, *hot* water, which should be maintained at as high a temperature as can be borne by fresh additions of hot water at short intervals, until the pain and swellings are

considerably reduced. Occasionally moving the limb for half a minute into *cold* water, and returning to the hot, accelerates the cure. Afterwards, a cloth should be applied to the injured parts wrung out of cold water and sprinkled with a lotion of *Acon.*, *Arn.*, *Rhus*, *Ruta*, or *Hyper.*, according to the indications. The compress should be covered with oil-skin, gutta-percha tissue, or india-rubber-cloth, to prevent evaporation of the lotion, and till the part can be moved without much pain, which may often be done in two or three days, when the compress should be replaced by good tight strapping with strips of adhesive plaster, and gentle motion allowed. But great care must be observed for several weeks, as the injury may easily be re-induced, and then the cure becomes difficult and tedious, especially if the patient have a rheumatic tendency.

The following are the leading indications for the remedies, which, in addition to being used in the form of lotion, should also be administered internally, more especially when constitutional symptoms arise.

Arnica.—Contused appearance; *bruised feeling* all over.

Aconitum.—Heat, redness, and swelling; with much *constitutional disturbance*—feverishness, thirst, restlessness, etc.

Rhus Tox.—Sprains in the superficial or *tendinous parts*, with swelling and great pain; the pain is aggravated by rest and mitigated by cold. *Rhus* is also the best remedy for a sprain in the *back* from lifting. The strength of the lotion should be suited to the sensitiveness of the patient's skin, inasmuch as some are easily injuriously affected by it.

Hypericum.—Similar to *Rhus*, but it is especially valuable when the nerves are involved or lacerated.

In chronic cases, the administration of one or more of the following remedies may also be necessary: Calc.-C. or Phos. (*for weakness of joints*); Bry. (*pain, worse on motion*); Iod. (*effusion into the joints*); or K-Hyd. (*in rheumatic patients*). Bellis Per. and Ruta are also useful.

Dr. Beebe, of Chicago, states that strapping is the most speedy and effectual remedy for sprains. The parts should be strapped thoroughly, smoothly, and as tightly as possible, with adhesive plaster. In order to be effectual it must be

applied so as to exert a perfectly equable and firm pressure upon all parts of the joint, and especially over the affected ligaments. The plaster must be thick and firm enough to securely fix the joint, and render it immovable, and must be readjusted as soon as it is rendered loose by the subsidence of the swelling.

245.—Foreign Bodies (*Corpora adventitia*).

Treatment.—Any foreign body in the flesh—glass, a thorn, splinter, broken needle, etc.—should be removed as quickly as possible, by the fingers or by forceps, or sponge and water if the wound is lacerated.

Foreign Bodies in the Eye.—If sand, flies, or hairs are between the lids and the globe, they should be removed immediately by bathing the eye; but if the substance cannot be removed in this manner, the eye should be gently wiped towards the nose, with a soft, moistened handkerchief or with a feather, or a bent bristle may be used, the two ends being held by the finger and thumb. In one of these ways, with a little perseverance, the offending substance may generally be removed.

If small pieces of *flint* or *iron* become fixed in the front part of the eye they should be most carefully picked out with a needle or the point of a lancet. If the intruder be lodged in the upper eyelid, and cause much distress, it is better to evert the lid and remove the offender.

When *mortar* or *lime* enters the eye it occasions great pain, and is rapidly destructive. If *seen immediately*, the eye should be washed with a tepid solution of vinegar (℥j. ad. aq. ℥ij.). The lids should be everted, and every particle of lime carefully removed. The same course should be pursued when the eye is injured by an explosion of *gunpowder*, except that the particles may be removed with plain tepid water.

When the foreign body is removed, a weak *Arnica lotion* should be applied to the eye by means of lint or soft linen, and covered to prevent evaporation.

Foreign Bodies in the Ear.—Peas, slate-pencil, glass-

beads, shells, etc., are sometimes found in the ear passage; or cotton-wool which has been forgotten, or a portion of which only has been removed, is occasionally met with. If permitted to remain, such substances may occasion immediate symptoms of inflammation and deafness; in other instances, they may continue a long time, till difficulty of hearing or uneasiness in the ear leads to an examination of the tube. Any such body should be removed as speedily and as gently as possible, either by syringing the ear with warm water, or by means of small dressing forceps, or other suitable instruments. A drop of sweet oil let fall into the ear will cause the instant retreat of an insect. If the foreign body cannot be removed by gentle means, a careful examination should be made by means of the ear-speculum, and the aid of sunlight or a lamp. This examination is necessary for two reasons; for although a foreign body, if present, may generally be seen without such means, still the absence of such body cannot be affirmed without a complete exploration of the tube. Further, instances often occur in which surgeons are requested to remove a foreign body when none exists, and a proper examination with the speculum would often prevent any injudicious meddling with instruments. A late eminent hospital surgeon is said to have dragged out the stapes whilst attempting to find a small nail, which was not in the ear at all! A careful exploration of the canal, as above suggested, would have prevented such a serious practical mistake. Any soreness or inflammatory symptoms that may ensue from the foreign body, or the attempts at extraction, should be met by washing the ear with a weak *Arnica lotion* (six drops of *Arnica* ϕ to two tablespoonfuls of water), and afterwards enveloping the ear with a rag wrung out of the lotion, and covered with oil-silk.

Foreign Bodies in the Nose.—Such articles as are found in the meatus of the ear are sometimes pushed up the nose. If they cannot be removed by an ordinary polypus forceps, a current of tepid salt water, injected up the opposite nostril, will, if the patient keep his mouth open, return down the obstructed nostril, and bring the foreign body away. Or if this fail, the body may be removed by giving the patient an

emetic and holding a cloth tightly over his mouth when he is about to vomit.

Foreign Bodies in the Larynx, Pharynx, etc.—Speaking, drinking, or a sudden inspiration, with food in the mouth, will sometimes cause a portion to "go the wrong way," and bring on spasm, suffocation, and even death. The intruding food may pass on to the trachea or the bronchus (generally the right) and become fixed, causing pain, cough, and arresting the respiration of the lung on the side of the obstructed bronchus. If the patient can swallow water, there is therein evidence that the body is in the windpipe.

How removed.—Sometimes small, hard, sharp bodies are arrested between the pillars of the fauces and the tonsils, or larger ones at the junction of the pharynx with the œsophagus, or between the base of the tongue and the epiglottis. They should be removed by the finger, curved forceps, a blunt hook, or even by a skewer with the point turned: they should never be pushed down. If they have passed into the stomach, the diet should be of solid material, so that the foreign body may become embedded, if possible, and pass out through the intestines.

If the body cannot be reached, and the case be urgent, no time should be lost in restoring to catheterism or tracheotomy.

Laryngotomy, Laryngo-tracheotomy, and Tracheotomy.

Laryngotomy is not advisable for children, where there is any disease of the larynx, or if the foreign body is in the bronchus; it may be employed for adults when the obstruction is above or in the larynx. Chloroform should be administered if possible. The patient being placed on his back, a pillow under his shoulders so that the head falls over it, and an extra pad under the neck to increase the anterior convexity as much as possible, the chin should be raised and the shoulders depressed. When the head is perfectly straight, a line through the middle of the lower jaw, the notch in the upper thyroid, and the upper border of the sternum, will be the line of incision. The skin should be cut in this line perpendicularly, an inch and a half long, from the middle of the thyroid to the base of the cricoid. The sterno-

hyoid muscles must then be divided and the crico-thyroid membrane exposed. If time permit, branches of the superior thyroid artery should be tied. On thrusting the knife well into the larynx, air, blood, and mucus will be expelled. The opening should then be enlarged transversely and a canula introduced. A flannel, wrung out of hot water, should be placed over the throat, and the atmosphere impregnated with steam.

Laryngo-tracheotomy is not advisable for adults, but may be employed for children when the foreign body is within or above the larynx. The operation is the same as already described, except that the incision must be made somewhat lower, and continued into the windpipe from below upwards through the cricoid cartilage and the first ring of the trachea.

Tracheotomy.—"The patient's head being thrown back, a superficial incision an inch and a half to two inches long must be made, exactly in the median line, from the cricoid cartilage to the top of the sternum. The skin, superficial fascia, and fat, are then divided; the sterno-hyoid muscles are separated with the point of the knife; the loose cellular tissue and veins are cleared from the front of the trachea with the fingers or the handle of the scalpel, and the thyroid gland, if in the way, is pushed up. The operator must take great care to keep in the middle line, and must be very cautious not to cut *downwards* at the lower part of the wound, for fear of the large veins. Hæmorrhage may be arrested, if arterial, by the ligature; if venous, by nicely adapted pressure. A sharp hook or tenaculum is now to be passed into the trachea, to steady it; which done, three or four rings are to be divided, the edge of the knife looking upwards. As soon as an opening is made, if a foreign body be present, it is usually expelled with a strong gust of air; but if not, it must be searched for with a probe, and be removed by forceps or a blunt hook. If there be any difficulty, the plan may be tried, formerly practised with success (in Mr. Brunel's case), of turning the patient with his head downwards, in order to let the substance fall through the *rima glottidis*, and it may be remarked that, as soon as an artificial passage is made for the patient to breathe through, the great irritability of the

natural aperture subsides, so that it permits the body to pass. If the operation have been performed on account of laryngeal obstruction only, a tracheal tube must be inserted and allowed to remain. In either case, no attempt should be made to close the external wound. The use of a tenaculum or hook is of great importance; it holds the trachea steady during the cutting of its rings, and prevents the knife's point from touching its posterior part; it also much facilitates the introduction of the tube afterwards, or the removal of a foreign body. Tracheotomy is an operation by no means always easy or free from risk. It might possibly be not unfrequently superseded by catheterism of the trachea."—*Shaw's Medical Remembrancer.*

246.—Wound (*Vulnus.*)

Definition.—A solution of continuity, or separation, by external violence, of parts naturally united.

Wounds are termed *incised*, when made by clean-cutting instruments; *punctured*, when the depth exceeds the breadth, as stabs; *lacerated*, when the parts are torn and the lips of the wounds irregular; *contused*, when affected by bruising (see Section 243). We may also add that a *gun-shot* wound is termed *penetrating*, when the shot is lodged in the part *perforated*, when it passes through it, and, according to law, *burns*. For *poisoned* wounds, see Section 231.

Treatment.*—The following are the chief points:—1st.

* The "antiseptic treatment of wounds,"—as first chiefly practised and expounded by Mr. Lister, of Edinburgh, in which, during the opening of abscesses, or in the performance of various surgical operations, a cloud of spray of Carbolic Acid solution uninterruptedly envelops the part and the hands of the operator, and the wound is subsequently dressed with Carbolic Acid lotion,—seems to prevent local irritation, Erysipelas, Pyæmia, and the formation of pus, as the result of surgical and accidental injury. Constitutional disturbance is prevented or minimised. The modes of dressing which are employed may be gathered from modern surgical writers. When dealing with wounds on antiseptic principles, *the exclusion of atmospheric air*, as such, is strictly necessary, whether the air be *per se* the toxic agent, or whether it be a vehicle of those impurities which determine suppuration in an open wound. The air in contact with the exposed wound must be fully charged with the disinfectant, so that it may be admitted to the wound or cavity without risk to the patient.

To arrest the bleeding.—In most cases, the elevation of the part, keeping the bleeding surface uppermost, the application of cold, moderate pressure, and the co-aptation of the edges of the wound, will suffice. A *Calendula* lotion tends to arrest hæmorrhage and check suppuration. In severe wounds, involving *arteries*, the parts should be laid open by a surgeon, and the severed, or otherwise injured, vessels ligatured.

2nd.—*The removal of foreign bodies.*—Dirt, hairs, glass, clots of blood, etc., should be speedily removed by the fingers, forceps, or sponge and water.

3rd.—*To bring the injured parts into nice apposition.*—Any muscular fibres likely to prevent complete union should be relaxed or divided. If a muscle be transversely divided by the wound, the limb should be so placed as to relax it in such a way as to bring the edges of the wound into apposition. After the sides of the wound have been accurately adjusted, they must be kept so by strips of adhesive plaster, first applied to that side of the wound which is most movable, and then secured to the other. Spaces should be left between the strips of plaster, in order to allow pus or effused blood to escape. In extensive wounds, where plaster would be insufficient, stitches of silk should be employed.

4th.—*To promote adhesion.*—To secure this, the part should be kept at rest, and if the injury be severe, the patient should remain in bed.

5th.—When a wound is *dressed*, say once in every twenty-four hours, a rag wetted with warm water should be laid over the dressing, so that it may be removed without the risk of disturbing the surfaces which may have partially united. A lotion may often be renewed by removing the oiled silk only, and pouring it by means of a spoon, or dropping it, on the rag or lint, and then replacing the oiled silk.

6th.—*To control dangerous bleeding*, as from a sharp-cutting instrument. When blood flows in a *steady stream*, and is *dark-coloured*, it is from a vein, and can generally be checked by applying cold water, and exposing the cut surface to the cold air. But if large veins be wounded, they should be compressed with the fingers or by a bandage. A few thicknesses of linen, with steady compression, are more efficient than

heaping on a large quantity. *Bright-red* blood, flowing in jets, is arterial, and means similar to those just pointed out must be adopted, unless the bleeding be excessive; in which case a handkerchief should be tied round the limb near the wound, and between it and the heart; a stick should be inserted under the handkerchief and a firm compress placed over the course of the blood-vessel; the stick should then be twisted until it stops the circulation, and, consequently, the bleeding. But such means are only temporary, as wounded arteries of even moderate size require to be *ligatured* before bleeding can be permanently arrested. The manipulator should grasp the wounded artery with a pair of forceps, and draw it slightly and gently forward, so that it may be securely tied by means of a strong ligature of silk; or hæmorrhage may be arrested by twisting the end of the artery round and round until it will not untwist itself. The latter method is designated *torsion*.

Wounds of the face should be brought together very accurately, to prevent disfigurement; if possible, only plaster should be employed, which should remain for several days unless there be signs of inflammation; *Calendula* plaster, or the application of *Calendula* lotion, will, in slight cases, prevent the formation of a cicatrix. If plaster be insufficient, serrefines will be preferable to sutures. In wounds of the eyelids, eyebrow, or lips (as also in operation for hare-lip), the lines should be carefully preserved. Simple wounds of the cornea, iris, and other parts of the eye, are best treated by closure of the wounded eye with a pad moist with *Calendula* lotion and covered with a bandage, and closure of the other eye also, and by perfect rest. Effused blood will be absorbed.

Superficial wounds of the chest should be drawn together with sutures, the arm being brought forward and kept in place by a bandage. In wounds behind, the elbows should be drawn backward. If the wound have penetrated to the interior of the chest, blood and air-bubbles will exude. If a foreign body be in the wound, it must be removed if possible; but if there be doubt about its presence, the doubt should not be solved by search. The wound must be closed, bleeding

arrested, and perfect rest of the part secured. If the wound have penetrated to the lung, it may be known by the exudation of blood and air from the wound; expectoration of bright bloody, frothy mucus; deep pain; cough; and dyspnœa. In this case, in addition to the arrest of bleeding and the securing of perfect rest of the parts, ice may be given internally, also *Arnica* or *Hamamelis*. If the heart be wounded the treatment should be similar, with the administration of *Digitalis*. If the wound in the chest be from a gun-shot the patient should be laid on the wounded side, and foreign bodies removed. If there be two wounds the upper one should be closed, the lower one left open for exudation.

Superficial wounds of the *abdomen* must be closed with extra care, as they are liable to gape. Penetrating wounds require deep sutures. For treatment where viscera protrude, see Section 177 on "Hernia."

Cuts.—The treatment of this variety of wounds, if only of moderate size, is generally simple. The edges of the cut should be brought together and maintained so by narrow strips of *strapping-plaster;* then, if necessary, a bandage applied over the plaster. In two or three days, the plaster should be removed without disturbing the union, and replaced by new. If, however, inflammation and pain occur, the application of *lint*, saturated with *Calendula lotion*, covered with oiled silk, and a bandage over all, is necessary.

Should a wound or bruise be followed by constitutional disturbance—fever, chills, and throbbing in the parts—internal medicines should be administered.

Arnica (as prepared for internal use) and *Aconitum* will generally meet the requirements of such cases, and should be given every three hours, in alternation, several times; or if the injured part be very painful and swollen, with congestive headache, etc., *Bell.* may be alternated with *Acon.;* or with *Hep.-S.*, when suppuration is established, or *Silic.*, when the suppuration is unhealthy. *Hypericum*, internally and as a lotion, *Led.*, and *Lach.*, are also recommended. *Sweet oil*, or *Carbolic Acid* and oil, will facilitate cure.

247.—Fracture (*Fractura*)—Broken Bone.

Definition.—Fracture is a solution of continuity, or separation or breaking of a bone or bones, resulting from various causes, direct and indirect.

Diagnosis.—In a fracture, there is deformity of the part, with increased mobility; in dislocation, there is deformity with loss of natural mobility.

Symptoms.—The fracture of a bone may generally be detected by having felt or heard it *snap;* by some *deformity*, such as bending or shortening; by the fact that the lower part can be moved independently, while the upper end of the bone is held firmly by the hand; and also by a grating noise (*crepitus*) which may be heard if the broken ends are rubbed against each other; it is, however, important to remember that there may be fracture without *crepitus*. Further, there will be pain, loss of power in the broken part, and other symptoms. Fracture is said to be *simple*, when there is no wound of the skin communicating with it; *compound*, when there is such a wound.

Causes.—*Mechanical violence* is the most frequent; but muscular contraction is an occasional cause. Old age, some diseases, excessive drugging with Mercury, and prolonged disuse of a limb render bones liable to fracture from trifling causes.

Immediate Treatment:—

A broken leg should be fastened to the whole one by a handkerchief at the ankle, and above and below the knee, before the patient is removed.

A fractured arm requires the immediate support of a sling, which may be made by a handkerchief fastened round the neck.

A broken limb may be laid on a pillow and supported at the sides by boards. A temporary splint may be made of a roll of newspaper or other papers.

The patient must be moved *very gently*, and special care taken to prevent the broken bone from being forced through the flesh and skin. He should be placed on a stretcher or litter, and taken to his home, or to a hospital. A litter may

be made of a couple of poles and a horse-cloth or sack; even a door or hurdle may serve the purpose. A net or canvas hammock forms an excellent means of conveying a patient with very little jar. Placing him on this, and carrying him by two men, is much better than removal in a cart or carriage. It is important *not to be in a hurry*, as an injury is often greatly aggravated by want of thought, through too hurried measures.

For the immediate treatment of a wound causing much bleeding, see Section on Wounds.

When the patient has been placed on a firm bed or mattress, and the injured part examined, the broken ends of the bone should be brought as soon as possible into close apposition, and in their natural form, and maintained so, at rest, till firm union has taken place. To maintain the proper shape and length of the limb *bandages, splints*, and other apparatus are required.

Remedies.—Arn., externally and internally; Acon., Bell. (*inflammation*); Calc.-Phos., Calc.-C., Symphytum, Sil., Ruta (to *hasten re-union of the bone*); Ign., Cup.-M. (*spasmodic muscular action*); Hyos. (*sleeplessness*); Cham. (*fainting and twitching*); Mez., Ac.-Phos., Rhod. (*excessive pains in the bones*).

Fracture of the Skull.—This is usually the result of direct violence, as of a blow or fall. It may be a simple fissure, or a separation of the structure. The external table alone may be driven in, or the internal table may be fractured with very slight injury to the outer one. Fracture may, or may not, be attended with depression of the bone. Extravasation of blood beneath the scalp may be mistaken for depressed fracture. If the bone be broken the fissure may be distinguished from the cranial suture by showing a red line along its course.

Symptoms.—Escape of clear, serous fluid from the ear, conjunctival ecchymosis (if the fracture be in the orbital plate of the frontal bone); greater or less disturbance of the mental functions, torpor rather than excitement; symptoms of pressure on the brain, such as Paralysis; bleeding from the ear and nose; deafness. The first is the only invariable

symptom, the diagnostic value of the others is only relative. When there is much depression, the patient is comatose, his eyes are dilated, his breathing heavy and slow.

TREATMENT.—The wound should be thoroughly cleansed from dirt and other extraneous matter. If the fissure be simple, or attended with only slight depression, or if it be comminuted without wound in the scalp, or if there be no cerebral symptoms, or if the symptoms be slight (as from concussion), or if the patient be a child, no operation is usually required. The patient should then be kept in a *perfectly quiescent* condition, the wound being covered with a dressing of *Calendula* lotion, *Acon.* and *Bell.* being given internally, if necessary, to control inflammation. The diet should be very simple.

If the fracture be compound and comminuted, or caused by a sharp instrument, or if there be severe compression of the brain, the bone should be elevated, and spicula removed with great care, so as to avoid injury to the brain tissue. The trephine may be necessary.

FRACTURE OF THE CLAVICLE.—The collar bone is usually broken by indirect violence, as by a fall on the shoulder or on the hand. Shortening and deformity are said to be greater in the fracture of this bone than of any other, except the femur.

SYMPTOMS.—The patient leans towards the injured side; the shoulder falls downwards, forwards, and inwards; the sternal fragment is tilted upwards; pain is caused by raising the arm; crepitus on raising and rotating the shoulder.

TREATMENT.—Numerous appliances have been constructed, but not with great effectiveness. The simplest procedure is to support the forearm in a sling, bandage the upper arm to the side, apply *Calendula* lotion, and impose rest.

FRACTURE OF THE RIBS.—Broken ribs are of such frequent occurrence that they form one ninth or tenth part of all fractures. They are infrequent in children owing to the elasticity of the structures at that period of life; on the other hand, in older persons, owing to the density of the structures and the loss of elasticity, the accident is comparatively frequent.

CAUSES.—Blows, falls, the passage of wheels over the chest, pressure between two opposing forces, etc. In rare cases, the

ribs have been fractured from muscular efforts, as in severe fits of coughing; but in these cases, it is probable the ribs have undergone atrophic thinning.

Varieties.—*Uncomplicated* are those which occur without any internal or external lesion; *Complicated* comprise such as co-exist with an internal lesion, as where the ribs have penetrated the pleura, the lung, the heart, the intercostal vessels, the diaphragm, or the abdominal viscera. The uncomplicated are by far the most frequent. Out of 136 cases admitted into Guy's Hospital during five years, 108 were uncomplicated. The prognosis is generally favourable except in severe complications, and in elderly persons who suffer from Bronchitis and Asthma.

Symptoms.—The patient experiences a sensation of something having snapped or given way, and complains of a stitch-like or catching pain at the seat of injury during breathing, and increased pain on taking a deep inspiration. During coughing a sensation of *grating* is experienced, and the movements of the ribs are limited. By placing one hand over the supposed seat of fracture, and the other hand on the opposite side, *crepitus* may be felt when the patient takes a deep inspiration. The crepitation of a fractured rib may often be detected by *auscultation*.

Treatment.—A *flannel* bandage, about two hands broad, should be placed around the chest, moderately tight, with shoulder straps to keep it up. A rather tight-fitting bandage lessens the movement of the chest in breathing, and is a great comfort. Flannel is better than linen, as it is more elastic. Probably a better plan of treatment is to apply long strips of adhesive plaster, two inches broad, stretching from the spine to the sternum of the affected side, and successively applied to some distance both above and below. This plan possesses an advantage over the flannel bandage in not being easily displaced, and in only restraining that side of the chest in which the injury has taken place. Should there be Hæmoptysis, Pleurisy, Pneumonia, or other symptoms of internal mischief, *Acon.*, *Arn.*, or other remedies will be required, with rest, quietude, careful dieting, and entire abstinence from stimulants.

248.—Dislocation (*Loco motor ossa*).

Definition.—The displacement of the articular surfaces of a bone from their natural position. The bones farthest from the body are regarded as those dislocated, except in case of the *ankle*, when the foot is considered as fixed.

Varieties.—A *simple* dislocation is when the articular surfaces are separated without wound of the adjoining structures; *compound*, when there is a wound. A dislocation is *complete*, if the head of the bone is entirely removed from its natural position, as with the orbicular articulations; *incomplete*, if the parts are still partially in contact, as with the ginglymoid articulations. A *spontaneous* dislocation is consequent on destruction of the cartilages, ligaments, and articular cavities of the bones by disease.

Diagnosis.—In a dislocation there is deformity of the part, with loss of natural mobility; in a fracture there is deformity with increased mobility. Unlike that of fractures, the deformity is not removed by a moderate degree of traction. In dislocation the limb is shortened, seldom lengthened.

In some instances, when the dislocation has continued for a considerable time, it is difficult to determine whether the deformity is due to a dislocation or to chronic rheumatic arthritis. And such changes take place in the tissues, in their locality, attachments, and functions, that it becomes dangerous to reduce a long-standing dislocation, when it is found to be such.

Treatment.—The injured limb should be promptly and thoroughly exposed, that the displacement may be evident. If there be much swelling, so as to render examination difficult, an anæsthetic should be given. Thus by removing the sense of pain, and by relaxing the muscles (nitrous oxide does not relax muscle), the surgeon will be enabled to make the examination thorough, and sometimes to effect the reduction at once. The sooner the bone is put in its place the better; delay may cause disability for life. If the patient be not under anæsthesia, the replacement will be facilitated, especially at the last moment, if attention be diverted from the accident to some interesting or startling subject.

Reduction of *Dislocation* is generally effected by *extension*,

but much attention is now being given to reduction by *manipulation*. The act of pulling the displaced bone, so that it may fall back into its socket, always requires an accurate anatomical knowledge of the direction of ligaments and muscles; and generally a considerable degree of force. But it has been found that, with due regard to the powers of opposing muscles, and by flexion and rotation, the reduction may be effected without physical or mechanical force.

Constitutional symptoms must be treated with *Acon.*, *Arn.*, *Bell.*, etc.

Dislocation of the Shoulder.—This may be *downward*, *forward*, or *backward*. The downward displacement is the most common.

Symptoms.—When the shoulder is dislocated *downward*, the following signs are present: a hollow immediately beneath the acromion; fall of the shoulder and lengthening of the arm; the head of the humerus is felt in the axilla when the elbow is moved away from the side; the elbow when at rest stands off from the side and somewhat backward; inability to rotate the shoulder, or raise the hand to the head, or to place the head on the opposite shoulder when the elbow is against the side; numbness and pain of the arm.

Treatment.—By *extension*.—The patient lying on his back on a couch, the surgeon should place his heel, with his boot off, in the axilla, grasp the wrist and fore-arm, and pull with gradual steady force, at the same time slightly rotating the arm and drawing it toward the body. By *manipulation*.—The patient lying down and under chloroform. A patient should never be kept in the sitting posture under Chloroform, for chloroform produces cerebral anæmia. Chloroform should therefore always be given while the patient is in a recumbent position. The surgeon should grasp the fore-arm below the elbow, flex it, and carry the upper-arm out from the side, as nearly as possible to a right angle with the side. He should now either depress the hand and fore-arm, using them as a lever to cause the rotation of the head of the humerus forward into the socket, or he should place a hand on the shoulder, press the thumb on the head of the bone in the axilla, extend the limb, make it describe a semicircle towards the sternum,

at the same time press the head of the bone toward the glenoid cavity, then suddenly bring the upper-arm down to the side.

After reduction, the upper-arm should be bandaged to the side, the fore-arm placed in a sling, the shoulder covered with a compress of *Calendula* lotion, and rest imposed.

Dislocation of the Elbow.—The dislocation of the radius and ulna may be separate or combined, and in different directions. The most common displacement is of both bones backward, and is an accident very common in youth.

Symptoms.—The fore-arm is slightly flexed and shortened; the lower end of the humerus can be felt in front of the elbow-joint; the head of the ulna projects behind the head of the radius, and is more prominent on flexion, less so on extension; the olecranon is about an inch *above* the internal condyle; rotating power being lost, the fore-arm and hand are in a state of supination.

Treatment.—The patient sitting sideways on a chair, the surgeon should put his foot on the chair, and his knee in the bend of the elbow, with firm hold of the wrist, he should then press the knee firmly against the radius and ulna, and forcibly but slowly bend the fore-arm. The radius and ulna are thus separated from the humerus, the coronoid process is brought forward in front of the elbow, and the muscles pull it into its socket. If the joint can be flexed and extended with ease, the bones are replaced.

After reduction, the elbow should be bent at an obtuse angle, supported with a splint, and dressed with *Calendula* or spirit lotion; and the fore-arm should be placed in a sling.

Dislocation of the Hip.—There are four ordinary displacements of the head of the femur; (1) *upward* and *backward*, on the dorsum ilii; (2) *upward* and *backward*, into the great sciatic notch; (3) *downward* and *forward*, into the foramen ovale; (4) *upward* and *forward*, on to the pubes. The first is the most common, the last is rare.

Symptoms.—*Dislocation on the dorsum ilii.* Shortening of the limb from one and a half to three inches; adduction of the limb, abduction almost impossible; rotation inwards, slight flexion of the thigh, the great toe resting on the instep of the opposite foot; approximation of the trochanter major to the

anterior superior spinous process; bending forward of the body; loss of roundness of the hip; if there be no swelling, and in thin persons, the head of the femur may be felt moving on the dorsum ilii by flexion, extension, and rotation of the knee-joint. *Dislocation into the sciatic notch.* The symptoms are similar to those of the previous displacement, but the shortening is only from half an inch to an inch; the flexion is less; and the tip of the great toe only touches the ball of the great toe of the opposite foot. *Dislocation into the foramen ovale.* Lengthening of the limb from one to two inches; bending forward of the body; advance of the limb, and pointing forward of the toes; flattening of the hip; lessened prominence of the trochanter and its approximation to the median line; tension of the adductors, the head of the bone being felt below them and a little before the axis of the acetabulum.

TREATMENT.—The treatment of the first two displacements is similar, the great difficulty being to relax the ilio-femoral ligament; and this can be best accomplished by *manipulation.* The patient should be laid on his back on a mattress on the floor. The surgeon should then firmly grasp the knee with one hand, the ankle with the other, flex the leg on the thigh, and the thigh on the abdomen (thus relaxing the ilio-femoral). The flexion of the thigh should carry the knee as high as possible toward the umbilicus, but should cease as soon as resistance is felt. The knee should then be rotated outwards, across the abdomen, to the injured side. When the thigh is thus brought nearly at right angles with the body, it should be brought down by abducting the knee in a straight line with the body, the foot being carried across the uninjured limb. In dislocations into the sciatic notch the outward rotation must be diminished, lest the head of the bone fall into the foramen ovale instead of the acetabulum.

The manipulation of the displacement into the foramen ovale is thus performed;—The limb being grasped as already indicated, the thigh is flexed upon the abdomen, and the knee is carried up until resistance is felt. The limb should then be moved inward, so as to describe an arc, and then be brought down suddenly to the straight position. When the knee comes

within a short distance below the pubes, the thigh should be gently rotated inwards, to help the head of the bone into the acetabulum. Help may be further given by a band placed round the upper part of the thigh and pulled by an assistant.

After reduction, the two limbs should be laid and bandaged *together*, without splints, and kept in the recumbent posture for a couple of weeks.

Dislocation of the Knee.—This may take place forward, backward, inward, and outward. The last two forms are uncommon. The symptoms are easily recognised. The reduction is effected by extreme and forcible flexion and extension, accompanied by slight rotary or rocking motion of the joint, with pressure on the displaced bones.

249.—Exhaustion of the Muscles (*Exinanitio virium*)—Fatigue—Over-exertion.

Definition.—A condition of the *muscular system* induced by an undue drain on its strength.

Treatment.—If the feet be swollen or blistered, or the ankles ache after walking, a warm foot-bath may be used, to which a teaspoonful of the strong tincture of *Arnica* has been added; the relief afforded is often immediate and permanent. If the hands or wrists ache from excessive or unaccustomed exertion, they may be bathed in about a pint of water, containing twenty or thirty drops of *Arn.* If necessary, in one or two hours, the application may be repeated. In muscular fatigue from long-continued or severe exertion, affecting the hips, thighs, etc., a hip-bath, to which a drachm of the strong tincture of *Arn.* has been added, is an excellent remedy. The patient should remain in the bath about five minutes. Whatever kind of bath is used, and to whatever part applied, it should be *warm* if used in the evening or soon after exertion, but *cold* or *tepid* in the morning.

Arnica should be administered whenever there is muscular fatigue, from whatever cause. Its power to aid the restoration of exhausted muscles is truly wonderful.

Accessory Measures.—When suffering from fatigue, only a

light repast, or a cup of strong beef-tea, should be taken; a full heavy meal might occasion serious embarrassment to the digestive organs, which bear their proportion of the general weariness.

250.—Poisons (*Venena*).

When it is known that a deleterious substance has been swallowed, as *Arsenic*, or some other *mineral poison*, *Opium*, *poisonous fish*, *alcohol*, etc., vomiting should be immediately excited, by tickling the back of the throat with a feather or the finger; or, if this fail, by the administration of an *emetic*.

Emetic.—The following is a convenient emetic: for a child—a teaspoonful of salt or mustard in a tea-cupful of warm water: for an adult—a dessert-spoonful in a breakfast-cupful of water. This may be repeated as often as necessary, and followed by copious draughts of warm water, so as to empty the stomach as completely as possible. But if *Arsenic*, or *Tartar Emetic*, be the poison, no *warm* fluids should be used, as they tend to increase the activity of the drug. *Ipec.* ℘, in doses of ℈ j.; *Sulphate of Zinc*, ℈ j.; or *Sulphate of Copper*, gr. iv. to gr. xv., will produce vomiting.

The treatment of cases of poisoning must, however, be considerably modified by the nature of the poison. See chapter on "Poisons," following the Materia Medica.

PART IV.

Materia Medica.

1.—Acidum Fluoricum—*Fluoric Acid.*

It forms no compound with oxygen; is difficult to procure in a pure condition; is the most caustic and corrosive acid known; its vapour is most pungent.

Leading Uses.—Disorders of the vegetative functions; chronic suppurations; caries; abnormal formations.

Head, Eyes, and Face.—Falling off of the hair (alopecia, calvitium), with congestion of blood; great loss of memory; irritation of the pharynx and fauces; salivation; *rapid caries of the teeth;* syphilitic caries of the bones of the skull; rhinitis (nasitis); lachrymal and dental fistulæ; feeling of sand in the eyes.

Digestive System.—Syphilitic affections of the fauces and tongue; chronic gastritis; diarrhœa and bilious vomiting; Ascites from hepatic disease, when *Arsenicum* has failed; protrusion of anus during defecation, etc.; Prolapsus Ani in children.

Genito-Urinary Organs.—Purple deposit in the urine; satyriasis; nymphomania; premature and profuse catamenia.

Phrenitis; moisture of the hands and feet; numbness and powerlessness of the hands; whitlow; bronchocele; varicose veins sharp pains in the left side; pains in the bones; caries of the bones.

Analogue.—*Silic.*

2.—Acidum Muriaticum—*Muriatic Acid—Hydrochloric Acid.*

A colourless liquid, having a very sour taste and a suffocating odour.

Leading Uses.—Disorders of the *blood*, and of the ganglionic system which affects the gastro-intestinal canal. *Low forms of toxæmic fevers*—Enteric, Syphus, etc.; aphthous, ulcerative, and malignant affections of the *mouth*, *tongue*, and *throat;* Scarlatina Anginosa in the putrid stage, and *Diphtheria* (as a local application); want of appetite and defective ability to take food; blackish or brownish sordes on the teeth; etc. In the above conditions it rivals *Arsenicum*. Hempel suggests *Ac.-Mur.* for chronic ear-ache following Scarlatina, and we have found it most useful in several affections consequent on Scarlatina, Enteric fever, etc., especially Deafness, Diarrhœa, offensive purulent discharge from the ears, nose, etc., more particularly in scrofulous patients; burning itching eruptions, ulcers secreting a fœtid ichor, Eczema of the ear, etc.; sensitive tenderness of the anus, with or without Piles.

Ac.-Mur. may be used as a gargle or paint in ulceration of the throat, and in Diphtheria; also when mixed with glycerine as an application for Stomatitis Materna. Taken internally, it is generally prescribed in the 1st to 3rd dec. dil.

Analogues.—*Ac.-Nit., Ars.*

3.—Acidum Nitricum—*Nitric Acid.*

Leading Uses.—Affections of the parts where the skin and the mucous membrane merge in each other—mouth, throat, nasal and laryngeal membranes, anus, vagina; chronic, *Scrofulous*, *Syphilitic*, and *Mercurial* affections; chronic varicose veins, with tendency to ulceration; in the toxæmic fevers, *Ac.-Nit.* is frequently required, especially in typhoid or malignant Scarlatina, Small-pox, etc.

Eyes, Ears, etc.—Purulent Ophthalmia, fistula lachrymatis, spots on Cornea, shortness of sight, motes, gauze before the eyes; Otorrhœa; Ozæna.

Respiratory System.—*Chronic*, violent, *laryngeal*, *dry cough*, with stinging or smarting sensation on one side, as if a small ulcer were there; non-phthisical, coming on during day, nearly dry, with difficult expectoration, or much sputum; uneasiness in the chest; soreness at the bottom of the sternum; morning cough with much expectoration, little during the day till bed-time, no chest pain; morning cough with shortness of breath, which passes off after morning expectoration; paroxysms of cough, with emphysema, dyspnœa early in the morning, and much expectoration; teasing, short, dry cough, lasting long, without pain in the chest or elsewhere; Whooping-cough, phthisical cough, troublesome with much muco-purulent expectoration, worse in the morning and on lying down at night.

Digestive System.—Sore, diphtheritic, and ulcerated throat (internally as a gargle); salivation, with spongy swelling and bleeding of the gums; heartburn, with sour eructations; chronic Gastritis and Cardialgia of drunkards. Chronic Hepatitis, and Ascites following it. Diarrhœa of children, the motions being green, curdled, mixed with mucus, and passed with straining; chronic Diarrhœa and Dysentery. Constipation, painless, lasting several days; hard stool covered with mucus; stool resembling sheep's dung; scanty hard stool; long pressure upon rectum; distention of abdomen; obstinate costiveness. Fistula and Fisure of the anus: Prolapsus Ani: torpid Hæmorrhoids, the tissues having lost their contractile power.

Urinary and Generative System.—At the commencement of Nephritis. Enuresis, with fœtid, purulent urine. *Ac.-Nit.*, sufficiently diluted, has been recommended, and successfully employed, as an injection, for phosphatic Calculi, and chronic corrosive and fœtid Leucorrhœa; also as a local application for soft Chancre, syphilitic ulcers, and Condylomata. (Two drachms of the dilute acid to a pint of water.)

Skin.—Ulcers, with rapid destruction of tissue, soft edges of greyish-green colour, and very offensive; tendency to *fungoid growths*.

Analogues.—*Ac.-Mur.*, *Ac.-Sulph.*, *Merc.*, *Thuja*.

4.—Acidum Phosphoricum—*Phosphoric Acid.*

A colourless inodorous liquid, of an agreeable acid taste. It is obtained by the mutual action of *Phosphorus* and *Nitric Acid* in distilled water.

Leading Uses.—Nervous system, and generative organs. Fever (Typhus), with Diarrhœa of thin watery stools. *Physical or nervous debility*, from any cause, with *cold clammy sweats or profuse perspiration;* exhaustion from loss of the fluids of the body, as in hæmorrhage, excessive or prolonged Diarrhœa, Spermatorrhœa, etc.; passive Hæmorrhage, consequences of grief, care, too rapid growth, Onanism, etc. Phthisis, with colliquative sweats, great exhaustion, Diarrhœa, and general hectic condition. Spinal weakness, with great fatigue on exertion, and frequent inclination to pass water; curvatures of the spine; scrofulous *Caries of bone*, and consequent hectic fever. Falling off of the hair after a severe illness, or as a sign of general debility. In old-school materia medica, it is considered tonic, refrigerant, and aphrodisiac, and is administered in large doses (10 to 30 min.).

Head, etc.—Headache at the back and nape of the neck, with pale face, from nervous exhaustion; dull or confused intellect, weak memory, dejection of spirits, etc., from brain-fag, seminal or other losses, or exhausting disease. Weakness of sight, eyes glassy and lustreless, and deafness, during or consequent on severe disease. Deafness with more difficulty in hearing sounds close to the ear than when farther off.

Respiratory System.—Chronic Bronchitis, with bloody purulent expectoration, and night sweats; Pneumonia, with hardness of hearing, excessive weakness, pale sunken face, Diarrhœa, etc.

Urinary System.—Too *frequent desire to pass water*, especially in the morning; frequent Involuntary emissions of urine with nervous symptoms; Diabetes Mellitus; semi-phosphatic deposits in the urine, or alkalinity from nervous depression; milky urine in children.

Generative System.—Debility of *male* sexual organs; *seminal emissions from Self-abuse;* Impotence from too rapid escape of the semen in coitus or before it is complete;

general debility from sexual excesses or Spermatorrhœa. Thin, acrid, and chronic Leucorrhœa, with pale face.

ANALOGUES.—*Phos.*, *China*, *Anac.*

5.—Acidum Sulphurosum—*Sulphurous Acid.*

When Sulphur or brimstone is burnt, a highly characteristic pungent and stifling odour is evolved, which is the odour, not of Sulphur, but of its dioxide, and when this gas is collected in water, it forms *Sulphuric Acid.*

It has a powerful deoxidizing property, and a most destructive action on vegetable life; it is upon this latter property that its therapeutic value mainly depends.

Some years ago this acid acquired considerable notoriety, chiefly through the publication of a pamphlet by Dr. Dewar, of Kirkcaldy, who used the drug largely, and obtained most satisfactory results by its administration in a variety of diseases. Dr. Baikie has pointed out the general uses of this remedy, and offered suggestions on the method of its exhibition, with some cautionary hints.

An *Alcoholic Solution* of Sulphurous Acid is now prepared, which is a colourless fluid of intensely pungent sulphurous odour, and instantly bleaches litmus. In consequence of the rapid evaporation of this alcoholic solution upon exposure to the air, we recommend it for all the purposes for which Sulphurous Acid is used, especially in the form of a *spray* for the throat, or as a *gargle*, diluted one part to about ten of water. Also as a *disinfectant* and *deodoriser*.

Its dynamic action is similar to that of *Sulphur*, but it is more generally convenient and applicable for local use than the ointment of its base; and for inhalation, the *spray-producer* enables us to use it easily and with precision, while its fumes are readily producible at any time.

LEADING USES.—*Throat and chest affections*—diphtheritic Sore throat, Tonsillitis, clergyman's Hoarseness, chronic Catarrh, Influenza, Cough, Bronchitis, Asthma, etc.; *Neuralgia and Toothache*; *cutaneous diseases*—Ringworm of the surface, Eczema, Chilblains, Cracked and Chapped hands,

Ulcers, Sores, etc.; *vegetable and animal Parasites*—Scabies, Pediculi, Helminthiasis, etc. It is chiefly appropriate to *Chronic affections* requiring *Sulphur* internally, when local medication is also desirable, and especially when fungoid, parasitic, or septic conditions are present.

Besides its use in the form of a *spray*, it may also be applied by *fumigation*, or by *inhalation*, a few drops being poured on boiling water, and the vapour therefrom inhaled. Further, it may be used as a paint for the skin or throat, diluting the acid with about twice its bulk of Glycerine.

As an *antiseptic* and *disinfectant* in larders, kitchens, and as an agent for extinguishing contagion, it is very valuable.

6.—Aconitum Napellus—*Monk's-hood—Wolf's-bane.*

This plant is a native of Asia and of central Europe, and grows spontaneously in the damp and covered parts of almost every mountainous country, especially in Switzerland, Germany, and Sweden. On account of its beautiful flowers, notwithstanding its poisonous properties, *Monk's-hood* is cultivated and grows readily in the gardens of our own land.

The parts used are—the leaves, flowers, and root, from which tinctures are made; but it is from the root that the most active preparation is obtained.

Therapeutic Value.—As a therapeutic agent, in the hands of a homœopathic practitioner, *Aconitum* is one of the first importance. "This medicine," says Hempel, "constitutes the back-bone of our Materia Medica;" there being scarcely an acute disease in which it is not more or less required. Had Hahnemann's labours extended no further than the discovery and demonstration of the wide and inclusive curative power of this great remedy, they would have entitled him to the gratitude of countless myriads of his fellow-creatures in every succeeding generation. He most appropriately ranks it as first and foremost in his Materia Medica, because of its transcendent power and extensive sphere of action: he terms it a "precious plant," whose "efficacy almost amounts to a miracle." Let the sceptic in homœo-

pathic therapeutics test its power in *acute fevers*, and he will witness a curative action such as is unknown in allopathic practice, and which amply justifies the statement that "*Aconite* is the *Homœopathic Lancet.*" As confirmatory of this assertion, we may cite the extensive use of *Aconite* now adopted by allopathic practitioners of eminence as a substitute for the antiphlogistic measures formerly in vogue. Some striking instances of this adoption of Hahnemann's teachings and practice by men of the old school are given in the early numbers of the *Homœopathic World.**

PROMINENT USES.—*Aconite* is useful in all affections (*not toxæmic*) accompanied by, or depending upon, *arterial excitement* or *arterial congestion.* It is also very serviceable in some reactionary conditions—exhaustion after excitement, etc. It surpasses all other known remedies in its power of controlling the circulation, and triumphantly supersedes the lancet and the leech. "To enumerate the diseases for which it is suitable would be to mention the acute inflammation of every possible order and tissue of the body; and if it be not for all of these the sole remedy, it is almost always useful either previous to, or in alternation with, another remedy which has perhaps a more specific relationship to the part affected" (*Dudgeon*).

Although it may be often greatly abused, it is probably more frequently indicated than any other single remedy, especially at the commencement, and often during the course, of nearly all affections marked by *pain;* a *rapid,* strong *pulse; dry heat* of the *skin; chills,* followed by burning heat; restlessness; *scanty* and high-coloured *urine;* Constipation; aggravation of the symptoms towards night; notably in *acute Rheumatism, catarrhal fevers, Erysipelas, Hæmorrhage* from internal or external surfaces, especially of an arterial character, with full, bounding pulse. It acts by moderating and equalising the circulation, and so removing local congestion, especially when affecting mucous surfaces.

Acon. has, however, no power to control specific fevers depending upon a poisoned state of the blood, such as exists in Enteric, Typhus, and Intermittent fever; indeed, its continu-

* *Aconite*—a drug which enjoys certainly the nearest approach to infallibility, as a reliever of *dry* heat of skin, of any remedy that we possess."—*The Lancet.*

ance during these cases is injurious rather than otherwise. Even in the eruptive fevers—Scarlatina, etc.—it cannot reduce the pulse until the eruption comes out. Again, as Hughes remarks, *Acon.* does little for a fever which is symptomatic of an acute local inflammation. In Pneumonia, the pulse defies *Acon.*, but goes down quickly when *Bryonia* or *Phosphorus* touches the local mischief. "Indeed," writes the same author, "it may be laid down that unless a fever (*not being rheumatic*) has greatly abated within twenty-four hours of commencing *Acon.*, it is one for which the remedy is unsuited. But in some inflammations, especially rheumatic, *Acon.* alone may effect a cure, as being a specific irritant of the part affected. It is only when, in a part to which *Acon.* is not specifically irritant, true inflammatory changes have actually begun, that it ceases to exert remedial influence, and a remedy homœopathic to the local mischief must take its place." In the use of *Acon.*, the general recognition of these observations is necessary to prevent disappointment.

Nervous System.—*Neuralgia* depending upon arterial excitement of the affected part, such as occurs in persons debilitated by anxiety, over-excitement, etc., in whom the disturbed equilibrium tends to local congestions; *congestive Apoplexy*, with bounding pulse; *Paralysis*, with painful pricking sensations, and numbness and congested skin, as from needles; *Paralysis* of Spinal Meningitis, from cold; *Lock-jaw*, from the shock of a sudden injury; *Infantile Convulsions; spasmodic Croup; congestive Headache* when the sensorium is not involved; nervous tremors in sensitive and weakly persons; etc.

Mind.—Highly-raging delirium; excessive restlessness; anxious impatience; variable humour; apprehensiveness; sadness; fear of death.

Eyes, Ears, Face, etc.—*Acute Ophthalmia*, with shooting pains, and frontal headache; acute *Otitis*, *Otalgia*, and *Deafness*, from cold; *Catarrh* in the invasive stage (see "Respiratory System"); Nasitis; over-sensitiveness of smell; *Epistaxis* from cerebral congestion. *Facial Neuralgia* (see "Nervous System").

Circulatory System.—Rheumatic inflammatory affections of the *heart; Palpitation* from nervous, hysteric, or febrile

excitement, or occurring in plethoric or sensitive persons; *Congestion of the heart*, with anguish, heat, depression of spirits; the *paroxysms of Angina Pectoris;* fainting-fits, with collapse of pulse; and the deadly collapse of Cholera.

Respiratory System.—*Catarrh* and *influenza* in their *invasive* stages—dryness and burning of the air-passages, sneezing, burning and fulness over the eyes, headache, chills, weariness and soreness; fluent Coryza; chronic Catarrh, with thick mucus; acute Sore throat; Laryngitis; Bronchitis; spasmodic, dry, hard cough; Pleurisy; Pneumonia; Congestion of the lungs; Hæmoptysis; the paroxysms of Spasmodic Asthma.

Digestive System. — *Teeth.* — Rheumatic and congestive tooth- and face-ache, especially from exposure to cold and draughts of air; throbbing, pressing pains in the teeth or side of the face, relieved by cold water; fever attending Dentition. *Tongue, throat, etc.*—Dryness and swelling of the tongue; white- or yellow-furred tongue; soreness and dry heat in the throat; swollen, elongated uvula; rising of sweetish or acid water in the mouth. *Stomach, etc.*—Continual formation and eructation of flatulence; bilious nausea; vomiting of blood, with feverish symptoms (in alternation with *Arn.* if from a strain or blow); inflammation of the stomach, bowels, or peritonæum, from cold; constipation, with fever, profusely bleeding Piles; Diarrhœa during *teething*, the little patient's cheeks being flushed, with other febrile symptoms; acute *Congestion of the liver*, and threatened *Jaundice* (alternated with, or followed by, *Mercurius*).

Urinary System.—Retention or suppression of the urine from inflammation or congestion; high-coloured urine, with or without brick-dust sediment; burning and tenesmus of the neck of the bladder; inflammation of the kidneys; Urethritis; Acute Orchitis; etc.

Skin.—*Dry, hot,* harsh, and yellow colour; ephemeral itching and burning of the skin. *Acon.* is well indicated in the dry, burning heat or red rash of *children*, with thirst, etc. Perspiration occurring after this remedy marks its favourable action, and is the sign for its discontinuance.

Analogues.—*Ver.-Vir., Bapt., Gels., Bry., Cact.*

7.—Æsculus Hippocastanum—*Horse Chestnut.*

The tincture and trituration are prepared from the ripe nut, deprived of its shell.

Leading Uses.—All affections of the *rectum* and *anus*.

Digestive System.—*Hæmorrhoids*, with small discharges of blood, but much pain; fleshy piles, after confinement; swelling and rigidity of the rectum; *Constipation*, with very distressing sensations—aching, constriction, fulness, pricking, itching, and protrusion—in the rectum and anus, the pain also extending to the back. Dry, hard, knotted stools, passed with difficulty; prolapsus of the rectum. Inferior to *Nux V.*, *Sulph.*, or *Collin.*, where there is much abdominal congestion, and to *Ham.* when the hæmorrhage is copious, and there exists a general varicose condition of the system. The chief symptoms, then, for *Æscul.* are *Piles*, with constipation, severe pain, and but little hæmorrhage. Palpitation and congestion of the heart are additional indications.

Generative System.—*Leucorrhœa* with the characteristic pains and lameness in the small of the back. Lumbar and sacral pains which accompany Leucorrhœa or Hæmorrhoids, erroneously supposed to be of a rheumatic character, are specially under the control of *Æsculus*.

Analogues.—*Aloe*, *Nux V.*, *Sulph.*, *Podoph.*, *Hydras.*

8.—Aloe Socotrina—*Aloes.*

The tincture is prepared from the inspissated juice of the leaf, growing chiefly in the Island of Socotra.

Leading Uses.—Congestion of the alimentary canal, of all the pelvic viscera, and occasionally of the lungs. *Piles*, with profuse discharge of blood, great straining, burning and cutting pains, and rush of blood to the head; *Dysentery*, with similar symptoms. *Diarrhœa*, like that produced by drastic doses of the drug, having a bilious character and foul smell, and accompanied by an uneasy sensation about the liver, a continued inclination to stool, as if Diarrhœa were about to come on; *Menstruation*, when profuse, and associated with Piles as above described, or with determination of blood to the head.

Hempel states that *Aconite* is the best *antidote* for allopathic doses of *Aloes*.

ANALOGUES.—*Æscul.*, *Collin.*, *Nux V.*, *Sulph.*

9.—Ammonium Carbonicum—*Sesquicarbonate of Ammonia—Sal Volatile.*

LEADING USES.—Extreme debility, *dyspnœa*, and exhaustion; especially consequent on retrocession of an eruption, or on approaching death. Scarlet Fever, with predominance of throat symptoms. Chronic coughs, with bronchial irritation and tendency to Asthma; incessant cough, with feeling of down in the larynx. Epistaxis. Syncope with paleness, coldness, and sudden loss of strength. Symptoms ameliorated by the recumbent posture and by stimulants, but aggravated by sitting up and sudden exertion.

In difficult respiration, it should be administered by inhalation. Especially adapted to delicate females, and to weak, nervous persons, with lymphatic temperament.

The lowest attenuations must be used.

ANALOGUE.—*Ac.-Mur.*

10.—Ammonium Muriaticum—*Sal Ammoniac.*

LEADING USES.—Affections of all the mucous membranes, characterised by greatly increased secretions. No known remedy has more decided action on the liver.

NERVOUS SYSTEM.—Neuralgia; Megrim, or one-sided headache; Neuralgia of the face, of the Intercostal nerves, of the Sciatic nerve, not rheumatic, but from exhaustion consequent on over-walking or use of the legs; Myalgia, from over-work; Acute Jaundice, from depressing emotions and suppression of biliary secretion.

HEAD AND FACE.—Shooting, tearing pains on one side, worse in the evening, and when hungry, relieved by food and rest. Shooting, tearing, and burning pains, extending to the temples; better in the open air.

Trunk and Extremities.—Sticking pains on the muscles of the chest; with aching, tired feeling; aching, dragging pain in the small of the back and down the legs, with sensation of burning or stinging; heaviness of the arms or legs; coldness between the shoulders; bruised pains; wandering pains. Pains worse in the morning and during movement.

Throat and Nasal Passages.—Great secretion of thick, tenacious, and clear mucus, with sensation of stoppage at posterior nares and frequent desire to blow the nose; Catarrh of Eustachian tube, with noises and pulsations in the ears, especially at night, and deafness. Much tenacious mucus in the *Throat*, difficult to detach, especially in the morning, followed by dryness in Throat; enlarged and flabby Uvula; pain in the throat or neck when stretching it, or yawning.

Respiratory Organs.—Dry Cough, from tickling in the throat, worse after eating, drinking anything cold, and when lying down; hoarseness; frequent hawking, with expectoration of little clots of mucus, and roughness and rawness behind uvula; loose cough, with rattling in the chest; sticking pains in the chest, with oppressed breathing.

Digestive System.—Bitter Eructations; Hiccough; Regurgitation of food; Nausea after food; food causes pain as soon as swallowed; heat and fulness in the stomach; much rising of sour-smelling glairy mucus in the morning, giving relief to gnawing, sinking pains, a condition often experienced by tea-drinkers; great distention in the abdomen, with sticking pains extending to the liver; discharge of glairy mucus at stool, or stools hard and covered with mucus, followed by Tenesmus; Ascarides; burning, smarting anus after every stool. Functional derangement of the liver arising from congestion.

Genito-Urinary Organs.—Great pressure on the Bladder from above downwards, especially when lying down. Frequent desire to micturate day and night; and passing large quantities of clear urine, followed by scanty discharge, depositing a ropy sediment, and attended with pain in the kidneys and ureters. Amenorrhœa; menses appear too soon, and last too long. Diarrhœa and vomiting during Catamenia. Leucorrhœa, like white of egg.

Analogues.—*Ant.-C., Puls.*

11.—Antimonium Crudum—*Crude Antimony.*

This mineral is often found combined with small quantities of Lead, Copper, Iron, and Arsenic, and consequently requires great care in its preparation for medicinal purposes. We use the crystalline tersulphide, and prepare it for use by *trituration*.

LEADING USES.—Chiefly limited to the mucous membrane of the digestive tract when loaded with mucus, and the skin, more especially when those surfaces are *concurrently* diseased.

INTERMITTENT FEVER with Gastric symptoms. The attacks begin at precisely the same hour every day.

DIGESTIVE SYSTEM.—When this remedy is indicated, the *lining membrane* of the stomach and alimentary canal is loaded with mucus, and there are—foul, bitter *eructations*, tasting of the food; nausea, and sometimes vomiting; fœtid flatulence; loss of appetite; milky-white tongue; slow digestion, with drowsiness, loss of strength, etc.; Constipation, alternating with Diarrhœa. It is an excellent remedy in that morbid condition of the intestinal canal which favours the production of *worms*.

RESPIRATORY ORGANS.—Loss of voice on going into warm air.

URINARY ORGANS.—Chronic Catarrh of the bladder, with *turbid, fœtid urine*, and sometimes painful micturition.

SKIN.—Pimples or blotches; Nettle-rash associated with Indigestion; ill-conditioned, unhealthy appearance. *Warts* smooth, and scarcely raised above the surface of the skin. A *simultaneous* affection of the mucous membranes and the skin, as before remarked, is an additional indication for *Ant.-Crud.*

ANALOGUES.—*Ammon-Mur., K.-Bich.*

12.—Antimonium Tartaricum—*Tartar Emetic.*

Though less violent as a poison than was at one time supposed, this salt has, nevertheless, been highly destructive to life, and our chief knowledge of its physiological action has been derived from allopathic experience with it in large doses. For homœopathic purposes it is prepared by *trituration*, and solution.

Leading Uses.—The chief sphere of action lies in the *mucous membranes*, the *lungs*, and the *skin*.

Respiratory System.—Catarrhal inflammation, beginning in the lining membrane of the throat, extending to the trachea and bronchial tubes, and even exerting its irritant influence on the lung tissues themselves. In *Catarrh*, *Croup*, *Bronchitis*, and *Pneumonia*, it has proved a most useful remedy; in the *rattling breathing* and coughs of children and aged persons, when there is much mucus and defective ability to expel it; also in chronic cough, with profuse and easy mucus expectoration, and much gaping and yawning. Allopathic authorities now recommend *Tartar Emetic* for similar conditions.

Digestive System.—Pustular and catarrhal inflammation of the mucous membranes. The *vomiting* to which it is homœopathic, is nervous and sympathetic rather than gastric, and is attended by *nausea*, great straining, red moist tongue, pale skin, and much depression and prostration. In Constipation where there is great dryness of mucous tract—1st decimal trit., one-grain doses three times a day, is often beneficial.

Lumbago worse by movement, and sweat without relief.

Skin, etc.—When applied locally to the skin, or during its internal administration, as in allopathic uses of it, *Tart.-Emet.* produces a pustular eruption much resembling *Small-pox*; and in this disease it has proved of great value. "Not only does it cause a specific pustular eruption closely resembling that of Small-pox, but it has also the vomiting, the pustules of the mouth and throat, the viscid mucus clogging the air-passages, and the hypnosis of the blood, which no less characterise the disease. Correspondingly with this close homœopathicity, the power of *Tartar Emetic* as a remedy for Variola is very great. It is said to be especially useful in cases where the respiratory mucous membrane is much affected" (*Hughes*). *Sycosis* and a variety of cutaneous eruptions, especially *Ecthymia*, are amenable to this remedy. Sweat without relief. Intermittent Fever when there is no thirst during the chill; fever with pain in the legs.

Analogues.—*Ipec.*, *Phos.*, *Ant.-C.*

13.—Apis Mellifica—*Honey-bee.*

The medicine is prepared by macerating the part containing the sting, which has been cut off while the bee, having been enraged, is put under chloroform.

Leading Uses.—Rapid *acute œdema* of various parts. Inflammation of the mucous membrane of the genito-urinary organs, etc. In all affections for which this remedy is prescribed, the presence of urinary difficulties—retention, irritability of the bladder, etc.—furnishes additional indications for its administration. "No remedy exceeds *Apis* in its power to palliate or cure dropsical effusions in any of the serous cavities of the body."—*Hale.*

Throat, etc.—Sore throat, with œdematous swelling of the tonsils, uvula, and palate, and stinging pains when swallowing; Hoarseness and dry cough; acute œdema of the tongue,* etc. Absence of thirst in dropsical cases. Diphtheria. Hydrothorax. Dropsy of the heart.

Urinary Organs.—*Apis* has a direct action on the mucous lining of the kidneys and neck of the bladder; Nephritis; acute *Dropsy after Scarlatina;* inflammatory affections of these organs, with frequent urging, but inability, to urinate.

Generative Organs.—Threatened miscarriage; Amenorrhœa, Dysmenorrhœa, and Menorrhagia from acute congestion of the ovaries; *Hydrops Ovarii.*

Skin.—*Erysipelas* with rapid swelling, minus the inflammatory redness pointing to *Bell.*, or the formation of vesicles characteristic of *Rhus; Urticaria*, for which it is a prime remedy, especially if there be itching with stinging and burning, and acute œdema; *Carbuncles*, with extensive Erysipelatous blush; and other skin affections, in which burning, stinging, and itching are prominent symptoms.

Aggravation of symptoms occurs in cold weather; through

* There is scarcely a remedy that has such marked symptoms of Glossitis as *Apis.* In one case of poisoning, the inflammatory swelling was not the result of a sting in the lining membrane, or of the introduction of the poison into the stomach, so that the inflammation might be accounted for upon the ground of local action; but the inflammation occurred after a sting in the temple, showing that the virus has a specific effect upon the tongue.—*British Journal of Homœopathy.*

the night, especially after midnight, and from heat in a warm room.

ANALOGUES.—*Ars.*, *Canth.*

14.—Apocynum Cannabinum—*Indian Hemp.*

The tincture is prepared from the roots of the plant.

LEADING USES.—Chiefly restricted to mucous surfaces, serous membranes, skin and kidneys, manifest in *Ascites*, *Anasarca*, and nearly every form of *Dropsy*. "Dropsy with thirst, but water disagrees." Torpidity of the kidneys. Its beneficial action seems to be due to its power of restoring and *augmenting* the urinary secretion, and in some cases it proves rapidly curative, even after the ineffectual use of *Apis*, *Ars.*, *Hell.*, *Dig.*, *etc.* *Scantiness* of urine is the secondary condition. In Dropsy resulting from advanced organic diseases, as *Cirrhosis*, *Tubercular Meningitis*, *etc.*, this, like all other remedies, must prove inadequate for its removal. Nevertheless, it is a drug we should administer in the face of the most disheartening symptoms. "One of the few medicines which are really most trustworthy in cardiac dropsy" (*Hale*).

ADDITIONAL USES.—*Nasal Catarrh;* distention and oppression after meals, with some difficulty of breathing. *Sinking* at the pit of the stomach. *Menorrhagia*, and in some varieties of passive uterine hæmorrhage; the indications are debility, quick, feeble pulse, palpitation, irritability of the stomach, and suppressed urine. For Dropsy, one to four or five drop doses of the ϕ tincture; for Catarrh, as many of the 1x dilution.

ANALOGUES.—*Apis*, *Hell.*

15.—Argentum Nitricum—*Nitrate of Silver—Lunar Caustic.*

On account of the action of the salt on organic matter, the crystals are not prepared as a trituration, but in aqueous and then alcoholic solution.

LEADING USES.—Depression of the cerebro-spinal centres; Gastrodynia; *irritation* rather than great inflammation of the

mucous membranes and skin, causing teasing Cough and Pruritus; affections of the glands. "Carbo-nitrogen morbid constitution," characterised by defective oxidation of the blood.

Nervous System.—Incessant headache; headache deep in the substance of the brain; *lowness of spirits;* want of mental power; absence of ideas; anguish, excitement, and anxiety; in a great hurry; apathy, dejection, weakness, trembling; weakness of memory; taciturnity; restless, dreamful sleep; fantastic, troublesome, horrible dreams; sleep much disturbed; *Paraplegia* from debilitating causes; Locomotor Ataxy; *Epilepsy; Chorea.*

Eyes, etc.—Inflamed conjunctivæ; Chemosis; fluent coryza; *Ophthalmia Neonatorum;* abundant discharge of mucus; morning agglutination; vision weak or obscured; ringing in the ears; itching, inflammation, ulceration, abscesses of the nose; Epistaxis.

Circulatory System.—Irregularity and palpitation of the heart, especially at night; cardialgia, with heart-burn and water-brash.

Respiratory System.—Titillation of the larynx; Hoarseness and roughness in the larynx; dry cough with some blood-streaked mucus and much saliva; violent tickling in the larynx and cough daily before breakfast; dry paroxysmal cough; violent irritation of the chest, with constant cough and bloody sputa; dyspnœa even to suffocation; stitching pains; pressure and weight on the sternum.

Digestive System.—Malaise as if from hunger; nausea which ceases on taking food; sharp, stinging pains soon after taking food; upward emission of much flatulence; vomiting, with anguish, or with diarrhœa and colic; vomiting of mucus; cramps in the stomach at night, with hunger in the morning on waking; spasms of the gullet, stomach, and intestines; coldness in the hypogastrium; cramps in the abdomen following slight cold; acute stitches in the liver when walking; occasional acute stitches in the spleen in the evening; gurgling flatulence in the intestines; relief of many discomforts after expulsion of flatus; constipation or diarrhœa; liquid brown, blackish stools; bloody stools with prostration; ulceration of

the intestines; violent itching of the anus; ascarides and tænia.

Genito-Urinary System.—Urethritis; flat pseudo-chancres on the glans penis; Diuresis; painful, scalding urination; shrivelled penis; emissions; absence of sexual desire; metrorrhagia; menstruation punctual but abundant, and attended with cutting pains in the sacrum and loins; *Chlorosis.*

Skin.—*Itching*, with stinging in different parts of the body, especially at night; vesicular eruptions; pustular ecthyma; warty growths; livid skin, especially where exposed.

Topical Application.—If specific treatment be not promptly beneficial, it may be desirable to subdue inflammation and ulceration of the skin and mucous membrane (to which it is homœopathic) by local application.

Analogues.—*Ars.*, *Merc.*, *Phos.*

16.—Arnica Montana—*Mountain-Arnica—Leopard's-Bane.*

This plant is indigenous to the mountainous plains of a great part of continental Europe; also to America and Siberia; but it flourishes particularly in Switzerland. Its medicinal properties are more especially concentrated in the dried rhizome and in the root, which has not been exposed to the air. The strong alcoholic tincture is of a brownish-yellowish-green colour, yielding a strong characteristic odour, which predominates over that of the alcohol.

Leading Uses.—"It is to an injury what *Acon.* is to a chill; it will almost infallibly neutralize the ill effects, if given before organic mischief has been set up" (*Hughes*). *Injuries*, immediate or remote, local or general, *from falls or blows;* severe concussions, such as often occur in railway accidents, without leaving external marks of violence; concussion of the brain; *physical fatigue;* back-ache, stiffness and soreness from walking, riding, etc.; the so-called Rheumatism of the intercostal muscles from over-exertion; spasmodic Cough, which causes aching and soreness of the sides, and even Hæmoptysis. Aching of the eyes through over-use, Epistaxis or Hæmatemesis, from severe exertion or a blow. *After-pains;* Angina Pectoris,

when the pains are brought on by slight exertion; sores of bedridden patients; Chilblains; small Boils; etc.

Special Characteristics.—It is chiefly adapted to plethoric persons, disposed to cerebral congestion, and acts but feebly on those of soft flesh or debilitated constitution. Its power over all *ailments resulting from injuries* is wonderful. *Hunters* are liable to falls, the effects of which, though no bones be broken, are generally painful: one or two drops (1x) in half a wineglass of water, repeated once or twice, works wonders in these cases. Next morning, in place of being stiff and miserable, the sportsman is ready for renewed engagements. Among *agricultural labourers*, a life of heavy toil often causes a comparatively early old age, with supposed Rheumatic pains, which incapacitate them from further labour. These "*miserables*" are greatly benefited by *Arn.* In fact, in almost every ailment traceable to *falls, hard knocks* or *blows*, or *hard work*, *Arn.* becomes an essential part of the treatment. In old-standing cases, the treatment should be commenced with a high dilution, and continued by a course of gradually lower dilutions.

Fever.—In Fever consequent on excessive bodily fatigue, *Arn.* 1x to 3x may be given intercurrently with other medicines, with great advantage; it promptly allays the aching and weary pains. *Intermittent Fever*, the paroxysm occurring in the morning; much yawning and thirst before the chill; aching of the bones.

Apoplexy.—In some cases of active congestion of the head in old persons, threatening sanguineous Apoplexy, *Arn.* acts admirably.

Respiratory Organs.—The 6th dilution will remove the hoarseness after public speaking (*A. C. Clifton*).

Heart.—Hypertrophy of the heart, induced by over-exertion, in young men. Cardiac neuralgia; cardiac myalgia; affections of the heart from injuries to the chest; disease of the muscular tissue of the heart.

Dysentery.—Partly from its relations to Hæmorrhage, and partly from its influence on muscular fibre, *Arn.* gives marked relief to the abdominal pains of Dysentery.

External Uses of Arnica.—*Formula.*—A *lotion* may be

made by mixing twenty drops of the strong tincture in about half a teacupful of water; if the skin be broken, the lotion should be somewhat weaker. The bruised parts may be bathed with this lotion, or it may be applied by linen cloths saturated with it, and covered with oil-silk, to prevent evaporation.

In *Bruises, Concussions*, etc., the consequent discoloration, stiffness, and swelling, may be almost or entirely prevented by the *prompt* use of *Arn.* A *black-eye* may thus be obviated. This action, however, depends very much on the *promptitude* with which it is applied after the injury. In *cuts* and *lacerations*, if *Arn.* be used, the lotion should be only half as strong as for bruises, and if there is the slightest tendency to Erysipelas it should not be used at all. *Aching and soreness* of the feet from excessive walking may be promptly relieved by a warm foot-bath, in which a spoonful of the strong tincture is mixed. For the *muscular fatigue* of *any part*, the internal action of the remedy will be well seconded by the application of a lotion. After the *extraction of teeth*, the mouth may be rinsed with a little water containing a few drops of *Arn.* *Sore nipples* are sometimes cured. The nipple should be bathed after each nursing, taking care to wash the part gently before again suckling. To *Corns, Chilblains, Chapped hands or lips*, and sometimes in *Rheumatism*, etc., *Arn.* is also an invaluable application.

In addition to the *tincture*, there are various useful forms in which *Arn.* is prepared:—*Arnica Cerate* and *Arnicated Balls*, for Chapped hands or lips, and for Chilblains; *Arnica Liniment* and *Opodeldoc*, for rubbing the parts in Sprains, Rheumatism, etc. (see "*Rhus*"); and *Arnica Court Plaster*, for cuts Corns, etc.

Caution.—*Arn.* is apt to produce, in some persons, especially those who are of gouty constitution, a severe form of Erysipelas, when applied externally. In some instances, it produces Erysipelas by the mere exposure in the room in which susceptible individuals sleep. Indeed, in consequence of this tendency, we but rarely prescribe a lotion of the strong tincture; substituting for it *Ruta, Calend.*, or *Rhus*. It should always be used with caution, and in a sufficiently diluted form; or if *Arn.* is

most indicated where there is this susceptibility, we apply an infusion of 1 drachm of Arnica Flowers in half-a-pint of warm water.

ANTIDOTE.—The *Erysipelas* produced by *Arn.* may be often cured by the application of *Camphor-lotion* (forty drops of *Spirits of Camphor* in half-a-pint of water), and by the internal administration of the drug at the same time. If the *Camphor-lotion* be too strong, unpleasant results will follow. *Canth.* is also sometimes used as an antidote.

ANALOGUES.—*Rhus, Bry., Ham., Ruta.*

17.—Arsenicum Album—*White Arsenic—Arsenious Acid.*

Taken into the mouth, *Arsenious Acid* has no immediate decided taste, but it soon occasions an acrid sensation. It is prepared for use by solution and trituration.

PATHOGENETIC EFFECTS.—Its injudicious or prolonged use occasions a general sinking of the vital powers, with derangement of the digestive and nervous systems, a small, quick, often irregular pulse, sleeplessness, and œdema of the face and extremities. Hence, in appropriate doses, it is admirably adapted to feeble and impoverished persons, and to a great number of their maladies. In material doses, its effects are :—1, irritation of the conjunctiva ; 2, swelling of the face ; 3, desquamation of the skin, only observable under a magnifying glass ; 4, dirty-brown appearance of portions of the skin, protected from light ; 5, peculiar silvery whiteness of the tongue. The deleterious properties of *Arsenious Acid* are widely known, and the foul deeds which have been committed with it have excited prejudices against its employment as a therapeutic agent. Poisonous doses produce violent *vomiting, diarrhœa,* burning *pain* in the stomach, *thirst, constricted state of the mouth and throat, flushed, swollen, anxious countenance, quick pulse, extreme debility,* and, usually, convulsions before death.

LEADING USES.—Disorders characterised by *debility, burning, œdema, emaciation, intermittence, inflammation* of the *mucous* and *serous membranes* and *skin.*

Affections of persons *debilitated* by excesses, innutritious diet,

endemic diseases of *low and marshy districts*, abuse of quinine, etc. It is especially indicated by great and rapid depression of the vital energies, *prostration and emaciation*, irritability of the intestinal track, pale, sunken, or bloated countenance, with hippocratic expression. *Asiatic cholera*, with cold breath, paralysis of the bladder, etc. General *dropsical swellings*; the swollen feet of aged and feeble persons; many chronic skin-affections, especially Eczema and Psoriasis, and *malignant diseases*.

In *Cancer*, it gives wonderful relief, improves the general health, and often checks the rapid development of the disease. The pains are of a *burning* character, *worse at night*.

Intermittent Fever, when the three stages are not well marked, occur irregularly, or when one of the stages has predominated or been absent. It ranks next to *Quinine* in its power over Intermittent fever. *Fevers* of a *low type*—Typhus, Enteric, etc., with rapid prostration, dry, burning skin, or cold, clammy perspiration; intense thirst; red, irritated tongue, extreme weakness and trembling; rapid, wiry, feeble, intermittent pulse.

Nervous System.—*Intermittent Neuralgia*, with burning-pains (some patients compare the pains to a red-hot wire along the nerve); the symptoms are generally worse at night, with mental effort, are relieved by cold water, and are accompanied by great restlessness and anguish. Weakness through long-continued anxiety, over-work, impoverished dietary, etc. Depression of spirits; hypochondriac dejection; great weariness and restlessness. Anxious restlessness; doubt of cure or fear of death, as in cholera. Periodic headache; great weight in the head, and stupefaction; *Chorea; Epilepsy*.

Eyes.—Ophthalmia, with burning-pains and soreness, scratching on the eye-ball, dread of light, and swelling of the lids.

Circulatory System.—Angina Pectoris; Hydrothorax; small, accelerated, and feeble pulse. Acute Pericarditis; Endocarditis in the stage of effusion, or when caused by Uræmia or Pyæmia; dropsy of the pericardium; threatened cardiac Paralysis. Rarely useful in idiopathic or rheumatic disease of the heart, but rather in cases of the secondary character.

Respiratory System.—Swelling, dryness, stoppage, or burn-

ing of the nose, with profuse acrid discharge; *Influenza;* suffocative paroxysms, especially after lying down at night; chronic *Bronchitis,* with oppressive, anxious, and laboured breathing, and great debility; difficult expectoration, the mucus being sometimes streaked with blood; dropsy of the chest; shortness of breath, especially on ascending a hill, with constitutional debility; inability to lie down, except partially propped up in bed.

Digestive System.—Dryness and bitter taste in the mouth; disagreeable odour from the mouth; Aphthæ; ulcerated, coated, cracked, red, and tremulous tongue; dryness and burning in the throat; throat affections of a serous or gangrenous character. Chronic nausea and vomiting, with heat and burning in the stomach and epigastrium, from ulceration; indigestion, water-brash, and vomiting after food; vomiting of drunkards, which usually occurs in the morning, and is generally accompanied by much distress; sensation of weight and anguish, with cold and chilly feeling; great tenderness or violent colic; Cancer of the stomach; chronic affections of the liver; diarrhœic stools, with frequent fœtid discharges, generally worse early in the morning; tenesmus, and burning at the anus; Diarrhœa from two rapid peristaltic action, hurrying the contents of the canal too quickly for proper absorption. As, however, the Diarrhœa caused by *Ars.* chiefly depends on intestinal *inflammation,* this remedy is not called for in merely functional diarrhœa, even if severe. But in the various forms of Chronic Diarrhœa, where there is general inflammation, ulceration, or some other kind of disorganisation, *Ars.* is a remedy *par excellence.* It has a special affinity for the mucous membrane of the intestinal canal, and its effects are nearly as great when introduced by *injection,* or through a wound, as when swallowed. *Nephritis and Dropsy from Heart* or *Liver disease* in debilitated patients.

Generative System (*Female*).—Premature, profuse, and too long-lasting menstruation; acrid, excoriating Leucorrhœa. Inflammation of the sexual organs.

Skin.—Earthy, bluish, cadaverous colour; *burning itching,* not relieved by scratching; *Malignant Variola;* red pimples, which break and form spreading ulcers; pustules, obstinate

Ulcers, and cancerous affections; fœtid secretions and tendency to run into mortification; *Psoriasis, chronic Impetigo, Prurigo, Urticaria,* and *Eczema.* In Psoriasis, Dr. Ringer states the first influence of the drug is to make the eruption redder and more inflamed. This fact, if not known, would lead to the suspension of the medicine just when it commenced to do good. At the same time, it is unnecessary to give it in doses sufficiently large to do this.

Analogues.—*Merc., K.-Bich., Iod.*

Arsenicum Iod.—"The Iodide of Arsenic," writes Dr. H. N. Martin, of America, "is my reliance in acute swellings of the axillary and inguinal glands, and sometimes when the submaxillary or swollen and threaten to suppurate. Even after the peculiar throbbing pains have set in, which seem to indicate the establishment of the suppurative process, I have known this agent to speedily disperse and reduce the swelling. It excels all other medicines for the rapid cure of venereal Bubo. I feel confident that this statement is not too strongly emphasised. I used it in the second or third decimal trituration." It is useful in Hypertrophy of the heart.

18.—Atropine—*Deadly Nightshade.*

The active principle of Belladonna, an alkaloid obtained from the root.

Leading Uses.—Atropia occupies the purely *neurotic sphere* of *Bell.*, having no place in its tissue irritations and vascular excitements. Nervous Headaches; Hallucinations; Epilepsy; irritable conditions of the Brain, Eyes, Throat, Larynx, Bronchi and Stomach. Spasm of Stomach or Cardialgia due to Ulcer of Stomach; Spasmodic and Neuralgic Colic; Spasms of the Eyelids; Iritis; Tetanus; nervous Palpitation of the Heart; Neuralgia of Genito-Urinary Organs; Whooping-Cough; Inflammation of membranes of the Spinal Cord. Puerperal Peritonitis; Puerperal Convulsions.

It should not be used in many diseases for which Belladonna should, as it has less action on the mucous membranes and more on the nervous system; nor in febrile conditions, acute

eruptive diseases, Erysipelas, or diseases of the glandular organs.

Mind and Head.—Rambling incoherent speech, spectral illusions, wild delirium, with picking of the clothes, beating and throbbing of the arteries of the neck and head, fulness of the temples, giddiness with staggering when turning round quickly; nervous pains, cerebro-spinal Meningitis, drowsiness with inability to sleep, heavy deep sleep with muttering.

Eyes.—Dull pain at back of eyes with heat and redness, flashes of fire before the eyes when closed; dilated pupils; dimness of vision; double vision; dizziness and inability to read small print; twitching of eyebrows; neuralgia of eyebrows.

Nose, Mouth, and Throat.—Intense heat and dryness of mucous membrane of these parts, especially during the night, and followed by indisposition for bodily or mental effort on the following morning; numbness and difficulty of protruding the tongue; difficulty of swallowing, especially solid food. Tetanus.

Digestive System.—Loss of taste and appetite, eructations, vomiting, neuralgic pains in stomach and abdomen; copious watery and sudden Diarrhœa; Constipation.

Genito-Urinary Organs.—Profuse and frequent micturition, with increase of solids in urine; violent and ineffectual desire to micturate, with inability; and involuntary straining, strangury, neuralgia of the kidneys; neuralgia of uterus and male genital organs.

Respiratory Organs.—Dryness of the Larynx and Bronchi, causing constant desire to cough, without expectoration; burning in the chest; constriction; cough in paroxysms; Spasmodic Asthma, like Whooping Cough, and causing vomiting.

Circulatory System.—Constant chills all over, or chills alternating with flashes of heat; phthisical sweats; pulse and heart's action feeble, but increased in frequency; nervous Palpitation of the Heart.

Extremities.—Trembling, tottering gait; numbness; tingling, pricking sensation; spasms and contractions of the muscles.

Analogues.—*Bell., Hyos., Stram.*

19.—Aurum Metallicum—*Metallic Gold.*

By British physicians it was formerly thought that gold had no curative qualities, on the ground that it was not soluble in the gastric fluid; but by the process of *trituration*, as first adopted by Hahnemann, gold can be made perfectly soluble. Of late years, the opinion of allopaths has been considerably modified as to the inertia of gold.

Leading Uses.—Syphilitic and mercurial cachexiæ; *Carics* and *Exostosis* of bone; Melancholia. The action of *Aur.* in the male sex resembles that of *Plat.* in the female, but its use is not limited to either sex.

Nervous System.—*Hypochondria*, with suicidal tendency, and rush of blood to the head; religious Mania; tremulous agitation and oppressive anxiety. Melancholy and great depression of spirits, with congestion of the head and liver. Deep despair; sense of friendlessness; longing for death; desire to commit suicide.

Nose, etc.—*Caries* of the nasal and palatine bone; herpetic pustules, with thick scabs round the nostrils and on the upper lip; purulent discharge from the nose, and fœtid odour; *Ozæna;* fiery sparks before the eyes.

Circulatory System.—Palpitation of the heart; frequent anguish and oppression in the cardiac region; faintness, with a blue *or yellow tinge* of the face. Cardiac diseases from abuse of Mercury.

Sexual Organs.—Chronic *Orchitis*, with aching pain; syphilitic Sarcocele; sexual excitement; nocturnal erections and emissions. Chronic enlargement of the testes.

Osseous System.—Inflammation and ulceration of bone; *Exotosis;* severe mercurial or syphilitic pains in the cranial bones; *nocturnal bone pains.* In our practice we have generally found the latter wonderfully relieved soon after commencing a course of this remedy: also Exostosis.

Analogues.—*Merc.*, *Plat.*

20.—Baptisia Tinctoria—*Wild Indigo.*

Baptisia is a medicine of great value where it is specific.

Leading Uses.—Disease of gastric mucous membrane, especially the buccal cavity and the lower part of the intestinal canal; and the lymphatic glandular system. The ordinary endemic fever of this country—Enteric or Gastric. According to Dr. Madden, the "Colonial fever" observed by him in Melbourne is shortened by it in a remarkable manner. It is also useful in some forms of Dyspepsia.

Fever.—*Gastric or Enteric fever. Bry., Rhus*, etc., more or less used in Enteric and other typhoid conditions, are now superseded by *Bapt.*, which antidotes the toxæmic state, at least in the *early stage*. In advanced enteric cases, and when disorganising changes have set in, *Ars.* is a better remedy. But if given early, the nausea and pains are quickly relieved, and the patient often makes a rapid recovery. It is probably of no value in fevers not toxæmic; but in Scarlet fever, and other diseases with *typhoid* symptoms, *Bapt.* should be administered as soon as the danger is threatened. Its power in these diseases resembles that which *Acon.* exerts in simple fever. We have repeatedly proved its value in fevers apparently simple, but which failed to yield to *Acon.* It should be given in a low dilution—the 1x, or even the strong tincture.

Digestive System.—In *Aphthous* conditions of the *throat*, with tendency to putrescence, enlarged parotid glands, ulcerated gums with foul breath, a gargle of a drachm of the mother tincture to four ounces of water is very efficacious. Tongue red and dry, or coated brown and dry, particularly in the centre; putrid offensive breath; sordes; ulceration of the buccal cavity; difficulty in swallowing; sweat, urine, and stools extremely offensive. Chronic Dyspepsia, with *great sinking at the epigastrium*, and a dry brown tongue in the morning. In Dysentery, especially in aged persons, with dark evacuations, or mucus and blood, colicky pains before stool, typhoid tendency, brown tongue, etc., it has been used successfully in almost hopeless cases. Soreness of the whole body with chilliness; patient feels sore and bruised in whatever position he lies.

Analogue.—*Gels.*

21.—Baryta Carbonica—*Carbonate of Baryta.*

Leading Uses.—*Inflammation of the throat*, and depression of the sexual functions. *Quinsy*—if administered early, the disease may be then checked; *chronic enlargement of the tonsils;* relaxed and easily-inflamed throat, with hoarseness; aphonia, with great relaxation of the muscular structures of the throat; facial Paralysis; paralytic and other affections of old persons, especially men (for aged women *Coni.* is generally more suitable); Wens, and Steatoma and Cystic growths; enlargement of Prostate Gland; Nocturnal Emissions, and Impotence; aversion to strangers.

Baryta Muriatica is used for *scrofulous affections*—enlargement of the glands, eruptions, &c.

22.—Belladonna—*Deadly Nightshade.*

An indigenous plant, of common growth throughout Europe and most temperate latitudes, flourishing upon a dry soil and on the slopes of hills. The leaves of the wild plant are considered more valuable than those of the cultivated. A tincture is prepared from the entire plant.

It has been employed by Spanish women as a cosmetic for the face, and to dilate the pupils.

Poisonous Effects.—The following are the symptoms produced by a poisonous dose:—Dryness and heat of the mouth and fauces, attended with thirst; difficulty in swallowing and articulation; constrictive spasms of the throat; nausea, sometimes vomiting, and at times swelling and redness of the face; dilatation of the pupils; obscurity of vision, or absolute blindness; optical illusions; suffused eyes; singing noises in the ears; numbness of the face; confusion of the head; giddiness; delirium, simulating intoxication, which may be combined with, or followed by, profound sleep; scarlet cutaneous eruption; and if the dose have been very large, complete coma, and death.

Leading Uses.—Disorders of the *cerebro-spinal nervous* system, of the *eye, throat, bladder, skin,* and *mucous membranes.*

Bell. is chiefly valuable in inflammatory affections of a violent character, in which the capillaries are almost ruptured by the force of the blood. Its chief characteristics are—stinging or burning pains, aggravated by movement; swelling and shining redness of the affected parts. It is especially adapted to persons whose brains are in a state of great functional activity, to persons of amiable disposition, inclined to become fat, with light hair, blue eyes, and delicate, easily-inflamed skin. Women and children, therefore, are specially amenable to its action.

Delirium, or perverted brain function, from active congestion; congestive headache, with scarlet flushings of the face; Infantile *Convulsions*, etc. *Scarlet-fever*, of the *red, smooth, shining* variety (but of little or no use in the so-called Scarlet-fever, in which the eruption is not smooth or bright-red). As a *prophylactic* against simple Scarlet-fever, its administration is a striking illustration of the principle of *similia*. Our own experience, both in private families and schools, amply illustrates the value of this appropriation of *Bell.* *Erysipelas*, with bright-red flush and great heat, especially if there be head-symptoms, dilated pupils, etc. (Vesicular Erysipelas with dull eruption, indicates *Rhus;* and excessive swelling, *Apis.*)

Difference between Belladonna and Aconitum.—*Bell.* resembles the action of *Acon.* in some points, but differs from it in the following respects:—(1) It produces much more intense congestion; the inflammations occasioned by it attain a higher form and are marked by symptoms of a much more dangerous character—delirium, convulsions, etc. (2) *Acon.* is adapted to simple fevers, or to the feverish reaction of the arterial system *generally; Bell.* to fevers with symptoms indicating active congestion or disturbance of the functions of the *brain*. *Bell.* has also a special affinity for inflammatory affections of delicate *organs* or *tissues*—the eye, the ear, the testicle, etc.—and to individuals of a highly refined organism.

Nervous System.—Giddiness; violent *aching in the forehead*, aggravated by stooping and movement; *pulsative headache* from cerebral engorgement, with heat and redness of the face, and tendency to perversion of the brain-function (*Gastric*

headache is better met by *Iris* or *Nux V.*); Acute Inflammation of the brain; *Acute Hydrocephalus; Epilepsy*, with active cerebral symptoms, and deep-red colour of the face during the fit; *Chorea; Squinting* (recent); *Infantile Convulsions* of true cerebral origin; intermittent *Neuralgia*, recurring in the afternoon, with scarlet-redness of the face. Nightly delirium, or paroxysmal insanity; fantastic illusions, quickly changing; horrible visions; nervous anxiety, restlessness, desire to escape; madness, rapid talk.

Sleep.—Sleeplessness, restlessness, or drowsiness; frequent waking; startings in sleep or when on the point of falling asleep, with cerebral excitement; screaming, moaning, or terrifying dreams; sleeping with the eyes open or partially open.

Eyes.—*Dilated pupils;* protruding, red, or glistening eyes; congestion, distortion, spasm, or convulsion of the eyes; Photophobia; inflammatory redness and burning pain in the eyes; catarrhal and acute Strumous Ophthalmia; complete or partial Amaurosis; perverted or double vision; *Muscæ Volitantes.* Neuritis optica (diagnosed with the ophthalmoscope).

Ears.—Tingling and roaring noise; catarrhal deafness, with sore throat; Deafness following Scarlatina or Typhus; lacerating pain in the ears; Otalgia; swelling of the glands near the ears.

Respiratory Organs.—*Violent*, dry *cough*, *worse at night;* cough from tickling in the throat, with headache and redness of the face; pain in the larynx when coughing; spasmodic Whooping-cough; *Hoarseness.*

Digestive System.—Furred tongue, with red, elongated papillæ appearing through the fur; inflammation of the mouth and tongue; *Toothache*, with *red, hot* face, *throbbing pains* in hollow teeth, extending to the temples, aggravated by eating and by hot drinks; redness and tenderness of the gums; catarrhal *Sore throat*, with sense of rawness, swelling and difficulty in swallowing (if the swelling be very great, *Apis* should be alternated with *Bell.*); bright-red appearance of the tonsils and uvula, with flushed face and headache; *Quinsy* (with salivation and fœtid breath, *Merc.*); spasmodic

constriction of the throat; diarrhœtic evacuations with straining, especially in children, with redness in the face before and during each motion; acute spasmodic pains in the rectum.

Genito-Urinary System.—Involuntary passage of urine, from Paralysis of the neck of bladder; Nocturnal Enuresis, in delicate, sensitive children; *irritability* of the kidneys and bladder (true *Inflammation* requires *Canth.*); chronic Menorrhagia, with colicky pains (in alternation with *Platina*); Toothache, Spasms, and Colic of pregnant women; Prolapsus uteri; Childbed fever; with congestion of the brain.

Skin.—*Scarlet redness*, with heat and dryness; diffused redness and burning swelling of the affected parts; *non-vesicular Erysipelas; Boils* and *Carbuncles.* See also next paragraph.

External Uses of Bell.—*Pleurodynia, Lumbago*, and *Neuralgia* are much benefited and often cured by *Bell. plaster.* Painful spots remaining after an attack of Lumbago, and excited by certain movements, are also much relieved by the application of the plaster. *Boils, Carbuncles*, and threatened *Abscesses of the breast*, are also well met by the local application of *Bell.* liniment or ointment. Inflammation of parts, threatening to end in Abscesses, have been thus arrested; or commencing suppuration limited, and the pain subdued, by the local use of *Bell.* The liniment, the extract, or the ointment may be used, or a drachm of the strong tincture to an ounce of olive-oil.

Solanum Nigrum belongs to the same natural order as *Belladonna*, and has often been mistaken for it. The pathogenetic effects are similar; but Dr. Hale and Dr. Hoyt report that *Solanum* removes symptoms which have not been relieved by *Bell.*, especially in cases of severe headache.

Analogues.—*Solanum, Hyos., Stram.*

23.—Bismuth—*Subnitrate of Bismuth.*

Leading Uses.—Diseases of the Stomach and Bowels.

In Dyspepsia depending on Chronic Inflammation of the Mucous Membrane of the Stomach, and also in Gastralgia or Cardialgia arising from Spinal Irritation; pain of a burning

and pressing character immediately after a meal; pain causes the patient to bend backward; frequent vomiting of food and drink as soon as swallowed; great thirst for cold drinks; white tongue; profuse flow of limpid urine; Constipation or watery Diarrhœa; Cough when the stomach is empty; much eruction of wind.

For Summer Diarrhœa with vomiting in infants, it is especially useful (or for vomiting only); tongue white; stools watery and putrid smelling; symptoms very similar to those calling for *Ars.*, or *Ver.*, but with this difference, that, where they are indicated by coldness on the surface of the body, *Bismuth* is indicated by heat.

It has proved useful for violent beating of the heart, and for Phlegmasia alba dolens.

Analogue.—*Ars.*

24.—Bryonia Alba—*White Bryony.*

There are many varieties of Bryony, but the one proved by Hahnemann is the *Bryonia alba*, indigenous to the north of Europe, Germany, and some parts of France. A deep yellow and very bitter tincture is made from the *root.*

Bryonia dioica—Black Bryony, common in the hedges and thickets of this country, is chiefly used as an external application for *Bruises.* Pugilists employ it in the form of a poultice, and it is said to remove all discoloration in from one to two days.

Leading Uses.—Diseases of the *serous membranes*, lungs, brain, liver, kidneys, and mucous membranes of the large intestines. *Rheumatism*, acute and chronic, *worse on movement*, and when affecting the joints and muscles; in *Rheumatic Fever* it is second only to *Acon.*; *Lumbago*, with acute bruised sensation in the loins, and pains increased by movement; stiff-neck, complaints in which the serous membranes are involved—*Pleurisy*, Peritonitis, etc.; Bronchitis, affecting the large tubes only; Pneumonia; Bilious, remittent, and Relapsing fevers, chilliness being a marked symptom; *Dyspepsia*; some affections of the liver, etc.

Head.—*Congestive and Rheumatic headache*, and headache

increased by movement; giddiness, sense of weight, fulness, and a feeling *as if the brain would press through* the forehead on stooping. Unlike the *Acon.* headache, it has generally a gastric or Rheumatic origin, and the ideas are not disturbed as when *Bell.* is indicated. Bleeding of the nose following Headache; lips parched, dry, and cracked. Inflamed eyes from gout.

Respiratory System.—*Pleuro-pneumonia* and *Pleurisy* (after, or in alternation with, *Acon.*); Acute Bronchitis, when the disease is not diffused (we have better remedies for capillary Bronchitis); common "Cold on the chest," consequent on a similar catarrhal affection; dry cough, with constant irritation, little expectoration, stitching or catching pains in the chest, sometimes so severe as to induce retching.

Digestive System.—*Water-brash*, Heart-burn, *acid eructations*, bitter taste, sense of weight or pressure at the pit of the stomach, as if a stone were lying there; bilious vomiting; *Constipation*, from torpor of the bowels, with congestive headache, the fæces being large, and their passage causing pain; *chronic* Constipation, with similar symptoms; congestion of the *liver*, with pain in the right shoulder, dull pain in the right side, and slightly jaundiced appearance (*Inflammation* of the liver requires *Merc.*).

Genito-Urinary System.—Red, scanty, and hot urine; premature and profuse menstruation; Amenorrhœa, with bleeding at the nose; congestion of blood to the head and constipation during menstruation. Milk-fever, and threatened inflammation and Abscess of the breast from cold, in nursing women, when the breasts are knotty, swollen, and sore: these symptoms may also arise from weaning.

Skin.—*Suppressed eruptions* are often redeveloped by a few doses of *Bry.*

Special Characteristics.—*Bryonia* is well adapted to persons of firm fibre, dark complexion, bilious and *irritable* temperament; also to affections brought on by exposure to cold, dry weather, and piercing winds; and when the symptoms are *intensified by movement.*

Analogues.—*Acon., Rhus., Puls., Phos., Nux. V., Merc.*

25.—Cactus Grandiflorus—*Midnight-blooming Cereus.*

This Cactus is indigenous to Mexico and the West Indies, and is not found in temperate latitudes, except in conservatories, where, of course, it is not so vigorous, nor so suitable as in its natural climate for medicinal purposes.

Leading Uses.—*Constriction* of the heart and other parts. *Affections of the heart and large blood-vessels*, in which congestion is dissipated, and irritation removed by the drug; Palpitation from nervous or organic disease, especially when lying on the left side; heart-complication in Rheumatic-fever, with excessive impulse of the heart's action, and intermitting pulse; acute and chronic Carditis; sense of constriction in the region of the heart, as if the organ were grasped and compressed by an iron hand, preventing its normal action.

Headache, with pressure or weight on the top of the head, especially in women with too frequent and copious menstruation; faintness and Palpitation; Vertigo, acute congestion of the head, with profuse Epistaxis, face bloated and red; objects look red.

Genito-Urinary System.—Menses too scanty; or attended with great pain, which comes on periodically and generally in the evening. Constriction of the neck of the bladder and of the uterine regions; urination in drops and with much burning; pulsating pain in the uterus and ovaries.

In some respects it acts similarly to *Acon.*; but in affections of the heart its action is unique. It is also said to have cured Chronic Bronchitis, Pleurisy, Pneumonia, Hæmatemesis, etc.

Analogues.—*Acon., Naja.*

26.—Calcarea Carbonica—*Carbonate of Lime.*

Calcarea Carbonica is found abundantly in the form of chalk-marble, egg-shells, oyster-shells, etc. For homœopathic purposes we employ *oyster-shells*, selecting the calcareous matter existing between the external and internal shells, from which we make a trituration.

Leading Uses.—The sphere of this remedy is very wide,

including *Scrofulous*, *Tuberculous*, *Rachitic*, and other affections depending upon *defective assimilation* and *nutrition*, with debility, loss of flesh, etc. Difficult teething; soft condition of the bones (Rickets), on account of which children are late in walking. Glandular swellings, ulcers, chronic diarrhœa, and incipient mesenteric disease, characteristic of scrofulous diathesis. Scrofulous Consumption, with tight cough, oppression, expectoration of yellow or green fœtid *pus*, Hæmoptysis, Hectic-fever, Night-sweats, etc. *Calc.* is best adapted to the disorders of women and children, to leuco-phlegmatic constitutions with tendency to obesity. The flesh is pale, soft, and flabby. Hysterical women, during climacteric years, especially if they have had no children and have suffered from profuse catamenia.

Head.—Chronic nervous headache, with eructations, and sense of *coldness in the head;* dull headache, worse in the morning, as from brain-fag; stupefying or throbbing headache; head and upper part of the body sweat profusely, especially at night; headache with empty eructations.

Eyes, Ears, Throat, etc.—Ophthalmia and Conjunctivitis, especially chronic, and in infants and scrofulous patients; dilated pupils; cutting pain in the eyes, worn by candlelight; itching in the canthi; Otorrhœa and chronic Otitis; chronic yellow or greenish purulent discharge from the nose (*Ozæna*); chronic Sore Throat, with dryness, and swollen tonsils; glandular enlargements. In these local affections, *Calc.* probably acts chiefly by improving the constitutional condition: it is not adapted to acute manifestations of the dyscrasia. Its external use, in the form of diluted lime-water, is sometimes very serviceable in connection with the internal use of the drug.

Digestive System.—Anorexia; *chronic acid eructations*, with burning sensation in the stomach; chronic Diarrhœa, with slimy, foul-smelling stools; Diarrhœa of children during dentition, offensive motions, part being light and part dark-coloured; colliquative Diarrhœa of Consumption; chronic Constipation with swelling of the bowels; swollen, distended abdomen, with emaciation and good appetite; mesenteric disease in scrofulous children.

Genito-Urinary Organs (*Female*).—*Premature, profuse*, and *protracted catamenia*. During menstruation, rush of blood to the head; heat in the head, vertigo, toothache; cold, damp feet. Itching and burning Leucorrhœa; Leucorrhœa like milk; Chlorosis in scrofulous girls. Painful and difficult urination, the urine having a peculiar, strong, pungent, fœtid odour. Stitches in the urethra; involuntary urination when walking.

Skin. — Chronic Urticaria, Porrigo Capitis and other Chronic Eruptions. Warts and Polypi, results of disordered nutrition and growth, are curable by *Calc.*

Analogues.—*Bary.-Carb.*, *Sil.*, *Phos.*, *Ac.-Phos.*

27.—Calcarea Phosphorata—*Phosphate of Lime.*

This salt is one of the most important mineral substances in the animal body, giving firmness and strength to the bony skeleton. Besides solidifying the osseous system, it furnishes nutrition for the soft tissues of the body, and its action in derangements of assimilation resembles that of *Calc.-Carb.*

Leading Uses.—Specially valuable in diseases of the osseous system—Rickets, Curvature of the Spine, Spina Bifida, Hip-joint Disease, Psoas Abscess, Scrofulous Ulcers, chronic enlargements of the tonsils, etc. By some, its good effects in Rachitis are supposed to be owing to its supplying a deficiency of this salt in the bones; by others, to its anti-psoric properties. Anæmia of young, rapidly-growing persons, and women weakened by rapid child-bearing, prolonged suckling, or excessive menstruation. *Chronic Tubercular* and non-tubercular *Diarrhœa*, and other profuse discharges, as in Leucorrhœa, chronic Bronchitis, and large Abscesses; Scrofulous sores; Caries of the bones; bad effects of living in town; Brain-fag.

Analogues.—*Ac.-Phos.*, *Sil.*

28.—Calendula Officinalis—*Marigold.*

The marigold is a native of France, but is now found in cultivated grounds in nearly all parts of Europe. The leaves and flowers are the parts used in medicine.

Leading Uses.—As an external application, it exerts a most favourable influence in promoting the union of wounds with the smallest amount of suppuration, and the least resulting scars. For *Cuts*, or injuries in which *the flesh is much torn*, and which do not heal without the formation of matter, Wounds penetrating the joints, etc., it is much preferable to *Arn.*, especially in constitutions having a tendency to Erysipelas. It controls hæmorrhage (but to a less extent than *Ham.*), and relieves the severest pains attending various accidents. It is invaluable in *Ulcers* of the lower extremities—bad legs as they are called—such as often occur in broken-down constitutions, in the decline of life. Dr. Nankivell informs us that a *lotion* of 20 drops to a teacupful of water is very useful in many chronic affections of the eyelids: he has never known it to have any repellent or inconvenient effect.

It is invaluable in surgical practice and dentistry.

Formula.—For Wounds, a teaspoonful of the tincture should be added to half or three-quarters of a teacupful of water. When hæmorrhage is considerable, the lotion may be stronger.

29.—Camphora—*Camphor.*

The Laurus Camphora, from which *Camphor* is obtained in great abundance, is a large, handsome evergreen tree, very common in China, Japan, and other parts of Eastern Asia, where it grows to the size of our tall oak. The narcotic, or narcotico-irritant principle, diffused through all parts of it—trunk, root, and branches—is extracted by sublimation. The odour, appearance, and volatility of *Camphor* are well known.

Pathogenetic Effects.—There are few remedies whose action on the animal economy is so variable and uncertain. Its chief usefulness is in *primary* symptoms. "In doses of gr. ij.-v-x, *Camphor* acts as a stimulant: it increases the action

of the heart and arteries, exhilarates the spirits, excites warmth of body and Diaphoresis, and renders the pulse softer and fuller. These effects are transitory, and are followed by depression. In somewhat larger doses, it allays spasm and pain, and induces sleep. In poisonous doses, it produces vomiting, vertigo, delirium and convulsions. It acts chiefly on the nervous system; and, like Sulphur, it transudes the skin, and is exhaled by the lungs. . . . It exercises a powerful influence on the genito-urinary system; occasionally it causes Strangury, yet by some authorities it has been advised to relieve the Strangury produced by Cantharides."

Camphor has not been known to prove fatal; indeed recovery has been effected after a dose of eight scruples. It should be antidoted by emetics, and the usual treatment for narcotic poisoning employed. (See Chapter on "Poisons.")

Leading Uses.—*Asiatic Cholera; Choleraic Diarrhœa;* sudden and extreme prostration of the nervous system, with severe chills, chattering of the teeth, pallor of the countenance, sense of internal heat, cold sweats, cramps, purging, etc. Lassitude, depression, and frequent yawnings; the *primary chill* of Catarrh or Influenza, in which stage only it prevents further development of disease. *Fainting-fits* from trifling causes, and *Hysteric attacks;* in these cases *Camph.* may be administered by olfaction.

Head.—Congestion and cerebral irritation, amounting even to Delirium; giddiness, wakefulness, and nervous irritability. *Sun-stroke* (the remedy being administered by olfaction); head symptoms from the retrocession of an acute eruption, as Measles, etc.

Cholera.—A saturated solution, containing equal parts by weight of *Camph.* and of spirits of wine (60° O P), recommended and successfully used by Dr. Rubini in several hundred cases of Cholera in 1866. Dr. Rubini directs that four drops of the saturated tincture of *Camph.* be given *on sugar* (not in water), every five minutes, to patients seized with Cholera, or in very severe cases five to twenty drops; and he states that, ordinarily, in two, three, or four hours, reaction will set in. His statements and successes have been abundantly confirmed in this country.

URINARY SYSTEM.—*Sudden Strangury*, with burning and great pain; in infants thus suffering, the remedy may be administered by olfaction for a few seconds, every ten minutes. It is also sometimes useful in sexual weakness and impotence, attended by coldness and relaxation of the parts, and especially when associated with Strangury or vesical irritability. *Camph.* removes the urinary difficulties consequent on the use of *Cantharides* (blistering-fly).

ANTIDOTE.—*As an antidote* to the excess of medicinal action of small doses of a drug, *Camphor* is very useful: a few doses frequently repeated will be sufficient. The Erysipelas produced by *Arnica* is often readily cured by *Camphor-lotion* (see "Arnica").

The *evanescent action of Camphor* requires that it be given in oft-repeated doses; it is only adapted to sudden diseases. It does not bear dilution. It should be kept apart from all other medicines.

ANALOGUES.—*Acon.*, *Ver.-Alb.*, *Bell.*, *Hyos.*, *Stram.*, *Canth.*

30.—Cannabis Sativa—*Hemp.*

LEADING USES.—Affections of the *genito-urinary* organs.

Difficulty in urinating; paralytic weakness of the bladder; symptoms of Stricture; burning and stinging before and after urination. It has cured the urinary derangement characterised by small quantities of urine, *like oil* (2x). Discharge of mucus and pus; Chordee; etc. *Gonorrhœa*, in the second stage. In Miscarriage and Menorrhagia, and consequent conditions, it is sometimes useful; menstrual Headache. Certain nervous affections, as sense of weight on Vertex, or as of drops of water falling on the head, or dull, throbbing pain, especially over the eyebrow and around the eye; opacity of Cataract and specks on the cornea. *Pericarditis*, sense as if drops were falling from Heart. Constipation, sensation as if cold water were dropping from anus. In *Humid Asthma*, where the Dyspnœa and agitation are extreme, and there is inability to lie down. The effects of *alcoholic intoxication* have also been remedied by this drug.

ANALOGUES.—*Apis*, *Canth.*

31.—Cantharis Vesicatoria—*Blistering-Fly—Spanish-Fly.*

The medicinal properties of the Spanish fly are extracted by pulverisation and percolation of the entire insect. The "fly-blister," so well known in allopathic practice, is repudiated by homœopathic practitioners.

Leading Uses.—Inflammatory affections of the *urinary organs;* cutaneous diseases, with burning and vesication; and as an external application in Burns and Scalds.

Urinary Organs.—*Acute inflammatory affections*—simple Nephritis, Cystitis, Urethritis, Chordee, Spermatorrhœa, due to the spread of gonorrheal irritation along the spermatic passages, etc. Pain in the loins; scanty, high-coloured, bloody, sometimes albuminous urine; but the influence of the remedy is greater over bloody than albuminous urine. Burning and scalding pain on passing water; tenderness at the lower part of the abdomen; *Strangury*, incontinence of urine, both in the aged and in children. *Hæmaturia* and *suppression* of urine from acute congestion. The sexual organs are probably chiefly affected through continuity of surfaces; burning in the pudendum, or vulva; violent itching in the vagina; swelling of the cervix uteri; suitable for slender women. It is sometimes useful in Dropsy following Scarlatina, and in desquamative Nephritis. In Hysteria, with throat-affection, and partially suppressed urine, followed, in a few hours, by profuse discharge of pale urine, it acts well.

Skin.—*Burns and scalds* with small or large *blisters;* Vesicular Erysipelas; Carbunculous and gangrenous sores; Shingles (*Herpes Zoster*); Eczema, with much *burning.* In these affections it is well to apply a graduated *Cantharis-lotion,* besides taking the remedy internally. Burning in the soles of the feet at night in hysteric patients, with profuse and pale urine.

External Use.—*Formula.*—Ten or twelve drops of the strong tincture to a small teacupful of water. If applied promptly to a burn or scald, it will often prevent blistering. *Cantharidine Pomade* is recommended for *recent baldness* and thinning of the hair after fevers and other exhausting diseases (see also *Ac.-Phos.*).

ANTIDOTE.—*Camphor-lotion*, as directed for *Arn.*, will correct any unpleasant symptoms from the external use of *Canth.* (five drops of strong *Camphor-tincture* to one ounce of water). The same remedy may also be prescribed internally for unpleasant symptoms due to *Canth.*

ANALOGUE.—*Tereb.*

32.—Carbo Vegetabilis—*Vegetable Charcoal.*

From pulverised charcoal, obtained by burning wood (generally poplar, beech, or birch) in covered-up heaps or in close vessels, we make a trituration, by which the latent medicinal properties of the crude substance are developed, rendering it a therapeutic agent of great value.

LEADING USES.—*Chronic digestive derangements*, with *flatulence* and *foulness of the secretions;* diseases marked by *loss of vitality* and *imperfect oxydisation of the blood*, as in the cold stage of Intermittent fever, when the hands and feet are blue and cold; in Enteric, Typhus, etc., with similar symptoms, and dry, foul tongue, frequent offensive Diarrhœa, and *extreme exhaustion; cold extremities*, arising from deficient vitality in the circulation, and associated with general Adynamia.

RESPIRATORY SYSTEM.—*Chronic* catarrhal *Hoarseness*—worse in evening and in damp weather—*chronic Bronchitis* in the feeble and aged, with scarcely sufficient strength to eject the mucus, which is profuse, and often foul-smelling; threatened gangrene of the lungs.

DIGESTIVE SYSTEM.—Easily-bleeding gums; and offensive *breath; flatulence*, distending the stomach, causing oppression, palpitation, etc.; *Heartburn and acidity*, with flatulence, and Constipation or Diarrhœa. It is specially valuable in the strumous, and when *Mercury* has been abused. *Diarrhœa* with offensive motions, especially in scrofulous children; chronic Diarrhœa in the cachectic, with sallow face, acidity, flatulence, etc. Offensive lochia.

SKIN.—*Foul Ulcers* (used internally and externally); chronic eruptions, with itching and burning, easily bleeding; inveterate Herpes; obstinate sores following burns, with foul, ichorous

discharges. *Carbon* should be sprinkled on in very fine powder.

Crude Charcoal.—In addition to *triturations*, we use finely-powdered charcoal freely, to promote digestion by its favourable mechanical action on the mucous membrane, and for its disinfecting and gas-absorbing properties. It is very valuable in chronic diseases, not as a direct medicinal agent, but to assist digestion. Charcoal acts upon the living, much as it does upon dead, matter, and is invaluable in many cases to alter existing disordered conditions. Thus in Ascarides, *Carbon* would not destroy the worms, but it would correct the secretions, and as they could only exist upon disordered secretions, they would be expelled by having nothing to live upon.

In all cases, the homœopathic remedies should be first administered; but if only partial good results, a course of *Carbon* should be given, and as it is a non-poisonous substance, it may be adopted with impunity. Nursing women with feeble and unhealthy infants have been benefited themselves, and by its use have indirectly benefited, and, in some instances, saved the lives of their offspring.

In *poisoning by Arsenic*, charcoal has been found useful; it should be administered in milk or water, and taken in large quantities as quickly as possible.

Analogues.—*Ars.*, *Lyc.*

33.—Caulophyllum Thalictroides—*Blue Cohosh.*

The habitat of this Berberis is from Canada to North Carolina and Kentucky. The preparation is a tincture obtained from the root in the spring, or a trituration of the active principle—Caulophyllin.

Leading Uses.—*Uterine affections* and *Rheumatism.*

We have found it of extreme value, in connection with *Cimicifuga*, during pregnancy as a *preparation for labour.* As a *uterine excitant*, *Caul.* takes the place of *Ergot.* One to three grains of 1x trit. may be given every twenty minutes, and it brings on regular contractions without the violent jerks

of *Ergot*. Uterine cramps; spurious labour pains; abortion; afterpains. It checks flooding and long-continued lochia. In *Suppression* of the menses, and particularly in *Menstrual Colic*, it is one of the best remedies. In *Aphthous Vaginitis* it has been found useful.

Some forms of *headache*, with dimness of sight and pressure behind the eye, if dependent upon uterine derangements, are readily cured by *Caul.*

It is most valuable for Rheumatism affecting the phalanges and metacarpal joints of the hand and foot, and, according to Dr. Ludlam, is more useful for those complaints when affecting females than males.

We generally use *Caul.* in trituration, the 1x to 3x attenuation.

ANALOGUES.—*Puls.*, *Cimic.*

34.—Causticum—*Causticum.*

This is a peculiar preparation from recently burnt lime.

LEADING USES.—Loss of voice; relaxation of the neck of the bladder.

NERVOUS SYSTEM.—Neuralgia of the left side of the face if relieved by cold application; or tendinous and muscular pains, with urging to urinate, and discharge of pale urine. Some cases of Facial Paralysis. Appearance of gauze, or floating insects before the eyes. Hemiplegia following apoplexy. *Epileptic Fits* occurring at night. *Progressive* locomotor ataxy. In *Coccodynia* and *Sciatica* it will sometimes be beneficial.

RESPIRATORY SYSTEM.—*Loss of voice* from cold or over-use of the voice in speaking or singing, worse in the morning; *cough*, worse in evening after getting warm in bed, or relieved by swallowing cold water, associated with involuntary emissions of urine during the paroxysms.

DIGESTIVE SYSTEM.—*Constipation*, with solid evacuations, expelled with difficulty, and having a shining, greasy appearance; itching of the anus, when not arising from Ascarides. *Hæmorrhoids*, painful when walking, relieved by pressure and by cold applications. *Fistula in Ano.*

URINARY SYSTEM.—Pain and weight in the loins, with urinary difficulties; *Enuresis* of children and aged persons; excessive discharges of urine during convalescence from severe disease, with sour perspirations, dejection of spirits, etc.; frequent urging to urinate in hysteric patients.

SKIN.—In *deep burns*, with formation of scabs, it is sometimes used locally with good results.

35.—Chamomilla Matricaria—*Matricaria Chamomilla.*

This plant is indigenous to most parts of Europe, and flourishes in cornfields, waste grounds, and by the roadside, especially on chalky soils. We prepare a tincture from the plant, gathered when in bloom.

LEADING USES.—Morbid sensitiveness of the sensory and excito-motor nerves. *Nervous affections*, generally, of women and children; *nervous and biliary* derangements from anger or vexation; chronic Abscess. Affections of the liver, and intestinal canal. Nervousness, palpitation, etc., from the use of *coffee* or *narcotics*, are met by *Cham.* The pains are worse at night; and after they have somewhat subsided, a sense of numbness may remain in the part.

NERVOUS SYSTEM.—Extreme sensitiveness to external impressions, without ideal confusion; Neuralgia with the same conditions; face-ache, with swelling; sleeplessness, flushes of heat, and palpitation, with bilious symptoms; Spasms and convulsions of women and children; restlessness, fretfulness, or convulsions, during dentition, with sour breath, pinching pains, flushed cheeks, greenish motions; spasms and convulsions during pregnancy.

HEAD, EARS, FACE, ETC.—*Bilious Headache*, with stupefying, oppressive pain, stitching and burning distress; nervous headache (on one side), with throbbing, flushes of heat, sensitiveness, and irritability of disposition; facial Neuralgia with irritable mood. *Ear-ache*, and cracks and soreness of the lips in infants, from cold. Twitching of eyelids in children.

RESPIRATORY SYSTEM.—Spasmodic cough, with tightness in

the chest; Catarrh of infants; Hoarseness and Cough (nervous) in women and children.

Digestive System.—*Toothache* from Indigestion, worse soon after eating, and from drinking warm fluids; Toothache with swelling, and pain as if the nerve were scraped. Tongue thickly coated with a yellowish-white fur, and red at the edges; sour breath of children, with pinching pains in the abdomen, greenish motions, and flushed cheek; *Diarrhœa*, and many other *affections during Dentition;* Dyspepsia, with pressure at the stomach, sudden stitches, sallow complexion, and yellow tongue; aching pain and sourness in the stomach after food, with irritability and greenish motions; nausea or vomiting of bile; Colic, with extreme soreness of the bowels; affections of the liver from anger, etc.; Bilious attack, with heat in the face, thirst, anxiety and restlessness.

Generative System.—Profuse menstrual discharge, dark or blackish, and coagulated, with griping or labour-like pains, sickness, frequent urging to urinate, and nervous irritability; pains in the veins of the legs; cramps or painful twitches of the legs of pregnant women, with nervousness; false labour-pains; uterine disturbance from excitement.

Skin.—*Rash in children*, alternating with Diarrhœa; eruptions generally in infants during dentition; simple Intertrigo; Ulcers, with burning-pains, and great sensitiveness; Ulcers with biliousness, sallow complexion, etc.; in these cases *Cham.* may be used both internally and externally.

Analogues.—*Coff.*, *Bell.*

36.—Chimaphila Umbellata—*Princes Pine.*

This tincture is prepared from fresh leaves bruised.

Leading Uses.—Disorders of the Genito-urinary passages; Catarrh of the Bladder; Inflammatory conditions of that organ and Irritability; Stricture of Urethra from irritation. Gleet.

The symptoms leading to the choice of this remedy are:—

Scanty secretion of Urine; frequent desire to micturate, with pressing, scalding, smarting pain in the urinary passage. Dysuria, with deposit of thick ropy mucus in the urine or of

blood, attended generally by Constipation. Excessive itching and painful irritation of the urethra from the end of the penis to the neck of the bladder.

It has also been found curative in Tumours of the Breast, resulting from ulceration which had the appearance of Cancer, with enlargement of the Axillary glands.

Analogues.—*Uva., Cann.-Sat., Canth.*

37.—China—Cinchona Officinalis—*Peruvian Bark.*

The Cinchona-tree, a native of Peru and the adjacent provinces of South America, is one of great beauty, with evergreen laurel-like leaves, which diffuse a delicious fragrance around. It is not found at an elevation of less than 2,500 feet above the sea, and sometimes extends as far up as from 9,000 to nearly 12,000 feet.

Triturations and solutions are usually made from the sulphate of the alkaloid Quina (*Sulphate of Quinine*).

Leading Uses.—*Tonic* and *antiperiodic. Debility from loss of animal fluids*—Hæmorrhage, Diarrhœa, Spermatorrhœa, profuse sweating, expectoration, suppuration, excessive lactation, etc. *Simple Intermittent Fever; simple Remittent Fever*, with prostration, and *Hectic Fever*, from Abscess or prolonged suppuration in any part; *periodically-recurring Neuralgias*, and other affections marked by *periodicity;* sensitiveness of the nervous system to physical impressions. *Irritation of the spine*, with imperfect circulation, as shown by blueness of the nails, coldness of the extremities, numbness, etc; *Anasarca* when associated with Ague or disease of the spleen; *sweating*, in cases of extreme debility, especially after severe fevers, the patient waking up every morning with his linen soaked. Disturbing dreams, causing anxiety and starting, the anxiety or confusion remaining some time after waking.

Debility, however, is little benefited by *Chin.* so long as its cause remains in operation.

Nervous System.—*Intermittent Neuralgia; Vertigo*, with dimness of sight, humming in the ears, and flushed face, succeeded by depression, yawning, etc.; headaches and other

nervous pains, and disorders occasioned by loss of blood or other discharges; tremblings, from debility caused by excessive mental labour; restless night sleep, with dreams causing starting and anxiety.

HEAD, EARS, ETC.—*Periodical* Neuralgia and congestive head-ache and face-ache; head-ache, with sense of *constriction* over the top of the head, and buzzing, singing, humming, or roaring noises; weight, fulness, and tension in the head, flushing of the face, etc. *Brow-ague* (malarial); nervous *Deafness* with noises in the ears.

DIGESTIVE SYSTEM.—*Diarrhœa* (chronic), or Diarrhœa occurring early in the morning or after a meal, without pain; simple summer Diarrhœa with severe griping, or absence of pain; passage of undigested food; periodic (malarial) *Dysentery*, with cold extremities, feeble pulse, etc.; *sinking of the stomach*, relieved by eating, but soon recurring, especially as then it often occurs through drinking tea; sensation of emptiness with or without hunger; *Jaundice*, in feeble persons, with sallow, dirty-yellow complexion, stitches in the liver, slimy-bilious taste, and loss of appetite; drowsiness and oppression after eating, and qualmishness in the stomach; congestion and enlargement of the spleen; ascarides in scrofulous children liable to Diarrhœa, with large abdomens.

URINARY SYSTEM.—Scanty and turbid urine, with whitish or brick-dust sediment; periodic paroxysms of *Hæmaturia*.

GENERATIVE SYSTEM.—Noctural Emissions and Spermatorrhœa, with debility, depression of spirits, Indigestion. Menstruation continuing too long, or being *profuse*, the discharge consisting of *lumps of dark coagula*; *irregular* menses; irregularity of labour pains; debility from excessive menstruation, Leucorrhœa, or lactation.

SKIN.—Unhealthy *Ulcers* in cachectic patients of a sallow appearance, with cold and dry or clammy skin; Dropsy; moist Gangrene.

ANTIDOTES.—The ill-effects resulting from the too free use of *Bark* or *Quinine* are best met by *Ars.*, *Ferr.*, *Verat.*, *Bell.*, or *Ipec.*, according to the accompanying symptoms.

ANALOGUES.—*Ars.*, *Ced.*

38.—Chloral Hydrate—*Hydrate of Chloral.*

The preparation is made by the simple addition of water to *Chloral.* Treated with an alkali, it is resolved into *Chloroform;* so that, as blood is alkaline, when *Chloral Hydrate* is introduced into the system, Chloroform is released. It is a hypnotic, not an anæsthetic. The character of the sleep produced by it is more natural than that of opium, although it sometimes occasions frightful dreams; even then, however, the sleep is apparently quiet. There are no bad symptoms after sleep, as is the case when opium has been given.

Leading Uses.—Excitement of the brain, and derangement of circulatory function.

Nervous System.—Confusion of thought; incoherent talking; wandering of the mind; night terrors, especially of children during teething; Delirium Tremens; Puerperal Mania. Cerebro-spinal Congestion; Traumatic, idiopathic, or infantile Tetanus. Chorea. Neuralgia from decayed teeth; Odontalgia traumatica. *Sleeplessness.*

Circulatory System.—Great dyspnœa, sense of suffocation; oppression at the base of the sternum; superficial pulse almost imperceptible; urgent thirst. Excessively rapid, weak, irregular, and intermittent pulse; intolerable sense of sinking and oppression at the pit of the stomach: gasping breath; heart regular, but acting with increased frequency and diminished force.

Digestive System.—Diarrhœa, worse at night, during dentition; severe colic of children; gastralgia: spasm of the gall-duct, and pain on the passage of calculi.

Generative System.—Chordee, during Gonorrhœa. Pains of labour, or Dysmenorrhœa and uterine spasms, but not if there be tendency to hæmorrhage. It promotes uterine contractions by suspending all counteractive reflex actions.

Skin.—Purpura hæmorrhagica; eruption simulating Scarlet fever; soft ulcers and ulcerated buboes; wounds and sores, marked by abundant suppuration and want of tone.

Dr. Hale states that when given to cause sleep or allay suffering, in material doses, it is best prescribed in *Syrup of Tolu,* 10 grains to the drachm; it should be administered largely

diluted. Twenty grains is the average soporific dose for an adult.

ANALOGUES.—*Ether, Chloroform, Gels.*

39.—Cimicifuga Racemosa—Actæa Racemosa—

Black Snake-root.

This plant grows abundantly in shady and rocky woods, on rich grounds, from Maine to Michigan, and in some other parts of America.

LEADING USES.—*Rheumatic, muscular, nervous,* and *uterine* affections. The *left* side of the body is chiefly involved. It will be found that those maladies which can be traced to, or are associated with, the uterine system, or Rheumatism, are most amenable to its action. On the uterus its action is similar to that of *Ergot*, but its employment does not endanger the life of the child, or the soft structures of the mother, as the latter drug does.

NERVOUS SYSTEM.—Restlessness; nervous tremors; apprehensive "nervousness"; nervous weakness and prostration; excitement, followed by irritation and exhaustion. Facial Neuralgia; pains in the left side, under the breast, in the back, and lumbar regions. *Chorea*, from cold, Rheumatism, or connected with deranged menstruation. Depression of spirits, from over-nursing, or uterine disorder. Weariness, sense of confusion, and heaviness, and dulness from mental labour or want of sleep. *Spinal* irritation, from Rheumatic or uterine causes.

HEAD.—*Rheumatic, nervous,* and *menstrual* headaches—severe *aching-pain in the eyeballs,* and over the eyes, increased by movement of the head or eyes: dull pain in the occipital region, *from within outwards,* with shooting-pains down the back of the neck; fulness, heat, and throbbing in the head, and feeling on going upstairs as if the top of the head would fly off; Neuralgia in the forehead and eyeballs. Throbbing, aching pain in the top and back of the head, from the shoulders down the spine, with strange, wild appearance, dilated pupils, Delirium, tremors, illusion of visions—rats, mice, insects,

etc.—dull aching in the eyeballs, sense of soreness in the eyes, black specks, Diplopia, roaring in the head, etc.; *Hysteria*, with similar pains, sensations, and illusions. "Nervous sick-headaches," and headaches generally, of delicate, nervous, and hysterical females, especially if connected with menstruation, pregnancy, or the critical age; headaches of hard students, and the cerebral confusion and distress of drunkards after alcoholic indulgence. In these conditions the absence of gastric disturbance is a further indication for this remedy.

Circulatory System.—Recent affections of the heart following, or due to, Rheumatism, with *irregular pulse*, palpitation, pain, etc.; paroxysms of pain and distress,—the heart's action seeming to cease suddenly, with a feeling as of impending suffocation,—similar to those of Angina Pectoris, chiefly felt after lying down at night, especially from rheumatic or uterine irritation; pain or anxiety about the heart, down the left arm to the hand, with palpitation, numbness of the left arm, and exhaustion. Pain in left side, under the left breast, in females (see "Nervous System").

Respiratory System.—Nervous Cough, and dryness of the throat, or sense as of a dry spot in the larynx, inducing Cough in girls and women, from uterine disorder, pregnancy, Hysteria, etc.; spasmodic action of the larynx in hysteric patients with hoarseness, sense of fulness or choking. Pleurodynia, or *stitch-in-the-side*, worse on exertion, and when taking a full breath. Catarrhs of women and children, with acute pains in the limbs, aching in the eyeballs, watery Coryza, head-, face-, and tooth-ache; dry, tickling Cough, worse at night.

Digestive System.—The *vomiting* and *sinking at the stomach*, cured by *Cimic.*, are not gastric, but sympathetic with brain or uterine disturbance. Primary dyspeptic complaints are not within its sphere.

Urinary System.—Pale, profuse urine, from nervous depression, as in Hysteria, uterine ailments, pregnancy, etc.

Generative System (*Female*).—*Amenorrhœa*—from deficient nervous energy in the ovaries, and excess in other organs, manifested by Chorea, Hysteria, or Headache; or from cold,

with intense headache, pain in the eyeballs, back, and limbs; uterine cramps, etc: *Delayed menstruation*—with heavy headache, palpitation, and melancholy. *Dysmenorrhœa*—with severe headache before menstruation, and, during the discharge, aching in the limbs, pain in the back, ovarian region, hips, and thighs, with pressing-down, labour-like pains in the abdomen, tenderness in the hypogastrium, and depression, nervousness, etc., the discharge being dark and coagulated; after the menses, the patient feels weak, and has neuralgic pains, with lowness of spirits. *Menorrhagia—from atony of the uterus*—with coagulated discharge. *Leucorrhœa*, also associated with uterine weakness. Neuralgic, rheumatic, and congestive affections of the uterus: the last may require the aid of *Bell.* or *Ver.-Vir.* *Abortion and miscarriage*, even when habitual, is sometimes under the control of *Cimic.* if administered early in threatened abortion, or for some time before the usual period of miscarriage, when there are cold chills during the day, for several days, with pricking sensations in the breast. *Disorders of pregnancy*—nervousness, depression, sleeplessness, sickness with uterine disturbance, cramps, and other neuralgic or muscular pains. *Sinking at the stomach*, occurring at the *critical age*, or in connection with other uterine troubles; chilliness, frontal headache, aching in the eyeballs and limbs, dejection. *Intermittent labour-pain* and other difficulties attending labour; it acts best as a *preparative*, along with *Caul.*, administered for several weeks or months before labour. *After-pains*, with nervous irritability, sleeplessness, and melancholy, especially when arising from exhaustion of the uterus after prolonged or frequent labours; *Prolapsus uteri* from the same causes. *Suppression of the lochia* from cold and mental emotion, with uterine Spasms, Cramps in the limbs, headache, and even delirium; *Puerperal Mania*—great despondency, etc., especially in rheumatic patients.

Organs of Locomotion.—*Stiff-neck*, *wry-neck*, *crick-in-the-back*, and *Lumbago*, of rheumatic origin; the Lumbago is worse when the patient is standing or sitting still, and in cold or stormy weather, but better when lying down; *stitches in the side*; Sciatica; articular Rheumatism of the lower extremities,

with heat and swelling. Muscular cramps and pains from Rheumatism.

Skin.—Urticaria and other irritations of the skin, due to reflex uterine action.

Analogues.—*Caul., Acon., Gels., Glon.*

40.—Cina Anthelmintica—*Worm-seed.*

From the seed of this hardy perennial shrub, which grows in Asia Minor, we make a tincture or trituration.

Leading Uses.—Intestinal worms, and worm-symptoms.

Nervous System.—Grinding of the teeth; starting, restless sleep; twitchings in various parts of the body; Convulsions; Epileptic Spasms.

Eyes, Nose, etc.—Dilated pupils, with dimness of sight and twitchings of the eyelids; some amaurotic conditions, with illusions of colour; *itching and picking of the nose.*

Circulatory System.—Pale face; semicircles under the eyes; emaciation; frequent feverishness.

Respiratory System.—Whooping-cough, associated with worms; spasmodic Cough, sometimes inducing vomiting.

Digestive System.—Voracious or variable appetite; pinching in the abdomen; itching of the anus; diarrhœa; large abdomen; pain below the stomach, worse on first waking in the morning and before meals, and relieved by eating.

Urinary System.—Frequent urination; wetting the bed; white, thick urine.

Since *worms* in the intestinal canal usually give rise to one or more of the foregoing symptoms, it is clear that *Cin.* is homœopathic to *helminthiasis* with similar symptoms: hence it is found curative or palliative in nearly all affections arising from, or coincident with, the existence of worms; it does not simply expel them, but corrects the condition on which the development of the parasites depends. Whenever the above symptoms occur, whether worms can be detected or not, *Cin.* is indicated.

Santonine, the alkaloid, is one of the most powerful parasiticides, and will destroy the life of almost any species of

intestinal parasite. It seems to have the most decided power over *lumbrici*, less on *oxyuris*, and least on *tænia*. Dose, two or three grains, 1x trit., before meals.— *Dr. Hale.*

41.—Cocculus Indicus—*Indian Berries.*

Although poisonous, this drug is used in considerable quantities for imparting an intoxicating property to malt liquors: by two writers "On Brewing" (Childe and Maurice) it is openly recommended. It is also used to poison fish and game. We make a brownish straw-coloured tincture from the berries.

Leading Uses.—Disease of the nervous system involving the motor nerves rather than idealisation.

Nervous System.—Excessive irritability; sensitive to insults, slights, and disappointments; melancholy; sad reveries; apprehensive fears, unknown dangers, and death; *Progressive* Locomotor Ataxy; *Hemiplegia*, with painful stiffness and creaking of the joints; *paralytic rigidity* of the lower extremities; Paralysis following Diphtheria; *confused* heavy sensation in the head, with *giddiness*, especially after eating or drinking, or on rising from bed; sensation of emptiness, or cloudiness in the head with dim-sightedness and black spots before the eyes after reading,

Digestive System.—Dryness and burning of the mouth and throat with difficulty in swallowing; sense of constriction; *Giddiness*, with hot, flushed face; *Sick-headache* (not gastric), like that occurring in sensitive persons from riding in a carriage, etc.; eructations and spasms in the abdomen, of a nervous origin, especially after eating; *Sea-sickness.*

Generative System.—*Menstrual colic*, with dull, indescribable headache, giddiness, and sickness; disordered digestion, flatulent colic during pregnancy or menstruation, with *nervous* symptoms; serous and purulent Leucorrhœa, with great soreness, and flatulent distention of the bowels.

Extremities.—Lameness and pain as if bruised; numbness and paralytic feeling; twitching and jerking.

ANTIDOTE.—*Camphor*, in a strong form, frequently administered, antidotes the effects of large medicinal doses.

ANALOGUES.—*Cham.*, *Nux V.*

42.—Coffea Cruda—*Raw Coffee.*

The raw berries of the *Coffee-shrub*, indigenous to the elevated regions of Arabia Felix, are employed in the preparation of the tincture.

LEADING USES.—*Excitation* of all the organic functions; increased *irritability of the organs of sense*—sight more acute, hearing more sensitive, taste finer, and sensorium more vivid; mobility of the muscles is increased, sexual desire is more excited, and even the nervous activity of the digestive and secretive organs is increased; hence a *morbid sensation* of excessive *hunger*, increased desire and facility of the alvine evacuations, and of the emissions of urine. In the sleeplessness, restlessness, and nervous disorders of children and females, it is a sovereign remedy, second only to *Cham.*

NERVOUS SYSTEM.—*Increased susceptibility to pain; sleeplessness*, either from simple nervous wakefulness, or from agitation of mind or body, extreme anxiety, or mental labour; the *wakefulness of children and old people* is especially under its control. In the 3rd to 6th dilution, it is often so effectual in producing calm sleep, that we have sometimes been asked, "Is it an opiate you have been giving?"

HEAD.—*Headache* and *Hemicrania* commencing in the morning, with *excessive sensitiveness*, chilliness, nausea, and feeling as if a nail were driven into the parietal bone, or as if the brain were being torn; *Neuralgia* of the right side of the head and face.

CIRCULATORY SYSTEM.—Nervous *palpitation*, with irregular, intermittent pulse; or pulse quick, with lessened force; oppression of the chest, as during an attack of Asthma.

DIGESTIVE SYSTEM.—*Toothache*, with great restlessness, flushed face, relieved by cold water, and sometimes recurring every night; Pyrosis.

URINARY AND GENERATIVE SYSTEM.—Difficulty in passing

urine; Strangury. Great sensitiveness of the genital organs. Profuse leucorrhœa. Extreme sensitiveness and pain during menstruation and labour; irregular, spasmodic labour-pains, with irritability; profuse lochia with great exaltation of all the senses. Hysteria, with alternate fits of liveliness and depression; flushes of heat, etc.

A spoonful or two of a strong decoction of *Coffee* will often immediately relieve *an acute Indigestion from over-eating*, especially when the stomach remains inactive, and the food causes a painful sense of distention or cramp. Coffee is useful when weary from travel in the heat, with *deprivation of food;* also for diarrhœa from overwork with *too much care*. It increases intellectual activity. It counteracts the effects of *wine* (*tea* is better for beer).

Coffee is also useful as *an antidote* to over-doses of *Opium*, *Aconite*, *Belladonna*, and many other vegetable poisons: for this purpose it may be given in frequently-repeated doses of a strong infusion. Strong Coffee helps to keep awake persons poisoned with *Opium*. As a *deodoriser*, when fresh roasted and ground, and applied to foul discharges in Cancer, etc., it removes all fœtor.

As a *beverage*, *Coffee* should not be used more than once a day. In some, it occasions Palpitation of the heart, sleeplessness, mental excitement, and Indigestion, and by such should not be taken as a beverage at all. (See Coffee, Sec. 6).

Analogues.—*Cham.*, *Ign.*

43.—Colchicum Autumnale—*Meadow Saffron.*

The preparation is made by expressing the juice from the fresh common bulb and treating it with alcohol.

Leading Uses.—*Gout* and *gouty affections*, characterised by paroxysms of acute *tearing* or lacerating pains, with irritated pulse; the rose-colour of the skin of the affected part becomes white on pressure; Nodosities; *inflammatory irritation* of the stomach, bowels, heart, or urinary organs of *gouty persons;* Asthma, palpitation, and *tearing* pains in the heart, cutting pains in the bowels, etc., alternating with paroxysms of Gout;

swelling, pain, heat, redness, and lameness in the extremities; muscular Rheumatism; *neuralgic pains*, tearing or lacerating, in the chest, abdomen, bowels, or anus, in persons having an arthritic diathesis; there may also be general debility, dropsy, heat and dryness, or perspiration.

Colch., in drop-doses of the strong tincture, is one of the best remedies for preventing an immediately-threatened, or arresting a recently-developed, *attack of Gout*. When there is circulatory excitement, *Acon.* should be alternated with it.

Analogues.—*Ver.-Vir.*, *Bry.*

44.—Collinsonia Canadensis—*Stone-root.*

The root of this plant, which is indigenous to the Northern American States, is the part employed in the preparation of the tincture.

Leading Uses.—*Affections of the rectum*—Constipation and Piles—from congestion. It is also of service in some Rheumatic and Cardiac affections. The Indians use it for the healing of bruises, wounds, sprains, etc.; it is also domestically used in America as a poultice and wash, much as we use *Arnica.*

Digestive System.—Blind or bleeding *Piles and Constipation;* Indigestion from loss of tone in the stomach, with *flatulence*, Colic, and Spasms in the bowels; throbbing headache and fulness in the head, and many other disorders from Constipation or Hæmorrhoids; much straining and dull pain at stool; heat and *itching of the anus*; "hæmorrhoidal Dysentery;" Diarrhœa of children, and *Cholera Infantum*, with Colic, Spasms, flatulence, and mucous, papescent, or watery discharges.

Generative System (*Female*).—*Dysmenorrhœa*, *Menorrhagia*, *Prolapsus Uteri*, and *Leucorrhœa*, when depending on hæmorrhoidal troubles; Amenorrhœa, when the hæmorrhoidal discharge is vicarious of menstruation; *Pruritus Vulvæ*, *Constipation*, or *Piles*, from pelvic congestion or *during pregnancy.* With the various affections there is considerable concurrent exhaustion; and most of the uterine troubles for which

Collin. is curative are dependent upon diseases of the rectum or bowels.

ANALOGUES.—*Arn., Aloes, Nux V., Podoph., Hydras., Sulph.*

45.—Colocynthis—*Bitter Cucumber.*

Turkey, Egypt, Japan, and the Cape of Good Hope are the habitats of this plant. It has been used in medicine from a remote period, and is supposed to be the *wild gourd* of Scripture. The pulpy or medullary matter surrounding the seed (without the rind), yields the medicinal product, from which we make a straw-coloured tincture, or a trituration.

LEADING USES.—Inflammation of the rectum ; *Colic with Diarrhœa ; Neuralgia. Pain* is its most essential indication.

NERVOUS SYSTEM.—*Neuralgic Hemicrania,* with sensation as if the head were in a vice, and pressive or burning-cutting pain in the eyeball ; violent stitches in the forehead and eyes, from within outwards ; beating in the ears ; Facial Neuralgia, chiefly on the left side, with *Headache and Toothache*—the pains being tearing, stitching, aggravated by warmth and motion, and occurring periodically. *Sciatica*—the pain being lancinating, and darting down the leg from the hip to the foot, worse when raising the limb, but better with continued exercise :—and especially when Diarrhœa and colicky pain also exist.

DIGESTIVE SYSTEM, ETC.—Severe griping or *cutting-pains* as from knives, in the abdomen and *about the navel,* increased by food, with irritability of the bowels, followed by copious Diarrhœa, with *straining,* the Diarrhœa affording relief : but the symptoms may speedily recur. Dysenteric Diarrhœa, the evacuations being first watery and mucous, then bilious, and then consisting mainly of blood, with severe Colic ; feeling in the whole abdomen as if the intestines were being squeezed between stones ; the abdominal Colic is relieved by bending double. Peritonitis involving the ovaries ; colicky and stitching pains in the ovaries and liver.

ANALOGUES.—*Bry., Ars., Cocc.*

46.—Conium Maculatum—*Spotted Hemlock.*

Spotted hemlock grows abundantly throughout Europe along streams and hedges and in waste places. When very young, it bears, like fool's parsley, a resemblance to common parsley, and has been mistaken for the latter, and eaten. The tincture is prepared when both flower and fruit are present.

Leading Uses.—*Paralytic*, cancerous, and strumous diseases, affecting old persons, females especially.

Nervous System.—Paraplegia, commencing in the feet, and gradually extending upwards; Paralysis following Apoplexy; hypochondriac depression of spirits; want of memory; nervous attacks, especially attended with excitement; *Headaches* which are worse from motion of the Eyes, or from a shock or jar; *Vertigo* when rising after stooping, or on going down stairs, or on quickly turning round.

Eyes, etc.—Inflammation of the eyelids, with suppuration, ulceration, excessive sensitiveness to light, and violent burning and itching, in scrofulous patients; Photophobia and discharge of scalding tears without inflammation; Presbyopia, especially the far-sightedness of old persons when it comes on prematurely; scrofulous Ozæna; Epistaxis; painful sensitiveness of the sense of hearing.

Respiratory System.—Dry, *hacking cough*, with constant irritation, scraping in the larynx, worse on lying down and at night.

Genito-Urinary System.—Scirrhous engorgements of the mammary and other glands resulting from mechanical causes; Atrophy of the breasts and testicles; Amenorrhœa; ovarian depression; uterine spasms and cramps; swelling of the testes from a blow; Impotence and Sterility. Frequent urination; intermittent stream of urine, the flow starts and stops repeatedly.

Extremities.—Numbness and coldness of the feet; tight and painful stiffness in the legs.

Analogues.—*Phos.*, *K.-Bich.*

47.—Croton Tiglium—*Croton-oil.*

From the seeds of *Croton Tiglium*, growing in Hindoostan, Ceylon, and other parts of Asia, the oil is expressed and prepared in tincture.

In the old-school Materia Medica, Croton is chiefly used as a purgative, and, externally, diluted with olive-oil or soap liniment, as a counter-irritant.

Leading Uses. — *Infantile Diarrhœa*, with yellowish or greenish watery stools coming out with great force—worse from drinking the smallest quantity. *Choleraic Diarrhœa*, and Cutaneous diseases. *Eczema*. Shingles. Intense itching and burning of the skin. Ulceration of conjunctiva, œdema, contracted pupil, dimness of cornea, tears.

Dr. Hughes says it is agreed that *Eczema* is the special form of Exanthem developed by Croton, and that the face and external genitals are its favourite habitats; he also mentions the 3rd decimal to the 6th centesimal as the most successful dilutions.

Analogues.—*Ver.-Vir.*, *Rhus.*

48.—Cuprum Metallicum—*Metallic Copper.*

When combined with acids, this metal is a violent irritant poison. Even food cooked in untinned copper vessels, by dissolving a portion of the metal, becomes highly poisonous. For homœopathic uses it is prepared in the first instance as a trituration.

Leading Uses.—Derangements, primarily of the alimentary canal, secondarily of the nervous system; characterised by *Cramps*, *Convulsive movements*, and *Spasms*.

Nervous System. — *Chorea*, especially of the upper extremities or of one side of the body, with neuralgic pains previous to or during the attack, and followed by Paralysis of the affected parts; *Epilepsy*, characterised by the violence of the Convulsions, and, usually, paleness of the face, Vertigo, and Headache, and muscular tremors; melancholy, debility, very slow pulse, languor, loathing of food, sallow complexion,

and emaciation from nervous affections; restlessness; tossing about, and constant uneasiness. Hysteria; Angina Pectoris; etc.

Respiratory System. — *Spasmodic* Asthma, Croup, and Whooping-cough.

Digestive System.—Chronic Vomiting and Diarrhœa; the *cramps* and *vomiting* of *choleraic Diarrhœa* and *Asiatic Cholera*; some forms of *Enteralgia*, Gastritis, and Dysphagia. Strong metallic taste in the mouth. Cutting and lacerating pains in the bowels.

Skin.—Some cases of Itch are curable by *Cuprum*.

Cuprum Aceticum and *Cuprum Sulph.* are also used by Homœopaths; but there is no difference in the sphere of action of the preparations: the effect of the salts is, however, more prompt, and, perhaps, more evanescent.

Analogues.—*Arg.-Met.*, *Ars.*, *Zinc.*

49.—Digitalis Purpurea—*Purple Fox-glove.*

The plant is abundant in Western and Central Europe; and for homœopathic purposes we prepare a tincture from the fresh leaves, or a watery infusion of the plant, as alcohol seems to neutralize *Dig.*

Leading Uses.—Disorders of the *heart*, especially of the muscular tissue; affections of the *pneumogastric* nerves; irritation of the renal tissue; disorders of the brain, characterised by frontal headache, dimness of sight, buzzing in the ears; inflammation of the stomach and descending colon.

Nervous System.—Functional derangements of the optic and auditory nerves; delirium due to failing power of the heart; despondency, fear, and apprehension of the future.

Head, Eyes, Ears, etc.—Frontal headache, with heaviness and throbbing, dimness of sight, sparks and colour before the eyes; buzzing in the ears; bloating and paleness of the face.

Circulatory System.—Every form and stage of weakness of the *heart* up to complete dilatation and Paralysis; feebleness of the muscular walls; palpitation; asthenia; torpid circulation; slow, *irregular*, *intermittent pulse*, excited by the

least movement, or *quickened and feeble* action of the heart; vertigo and restlessness due to cardiac debility; dizziness, shortness of the breath on exercise; sensation as if the heart would stop beating on movement; frequent stitches in the heart; Pleurisy; chronic hepatitis; Dropsy from Hypertrophy, dilatation, or enfeeblement of the heart; Dropsy of the kidneys and suppression of urine; *Cyanosis*, *Ascites*, and even *Anasarca*, depending on, or associated with, vascular derangements, menstrual irregularities, etc. We have repeatedly found *Dig.* of priceless value in removing dropsical accumulations, quieting urgent symptoms, and prolonging life when previously death seemed imminent.

Respiratory System.—Rapid respiration; Cough with profuse, loose purulent expectoration; Asthma, with rattling mucus in the lungs; Bronchitis, with a feeble heart, when the Cough comes on most after eating and causes vomiting and great prostration, the expectoration bloody or gelatinous; tendency to faint and perspire; Rheumatic *Pericarditis*.

Digestive System.—Nausea; motion produces vomiting and great faintness; feeling of goneness in the stomach; sinking sensation at the epigastrium; loss of appetite with clean tongue; white or ash-coloured stools, either dry or papescent, with white-coated tongue; obstinate constipation.

Genito-Urinary System.—Frequent and painful emission of small quantities of burning, cloudy urine, of a dark colour; profuse and frequent emission of clear, pale urine; urine can be retained better in the prone posture; *Spermatorrhœa* and nocturnal emissions; impotency with Spermatorrhœa; emissions with over-excitement; Hydrocele.

Analogues.—*Ars.*, *Phos.*, *Kalm.*

50.—Dioscorea Villosa—*Wild Yam Root.*

The root of this native of the United States is employed in the preparation of tinctures, or of triturations from the resinoid Dioscorein.

Leading Uses.—*Persistent Bilious Colic*; Spasmodic Abdominal Colic; Flatulent Colic; Cardialgia; Cholera Morbus;

Dysentery; Menstrual Colic; External Piles; Spermatorrhœa; Spasmodic Stricture of Urethra; Rheumatic Pains in the Limbs.

Head.—Pressive pains in the head, at the top and in the front; giddiness, with heat and pain in the head, followed by spasmodic pains in the stomach.

Digestive Organs.—White-coated tongue; frequent empty eructations; severe cutting, twisting or crampy pains in the stomach or bowels; pains often begin in a small spot, coming on suddenly, and leaving as suddenly after vomiting; pains appear to go to the back; attended with Constipation or Diarrhœa, or Dysentery with violent Tenesmus; severe cutting pains in Liver and Gall bladder; passage of Gall Stones, the pain of which is relieved by it; obstinate Constipation followed by Diarrhœa; stools are dark, or black and lumpy, followed by watery stools with cramps and great weakness; pains in abdomen, often shift and appear in remote places, as in the extremities; colic pains, worse by doubling up and at rest, compelling patient to keep in constant motion, with much rumbling of wind in abdomen; Diarrhœa, most common in the morning.

Genital Organs.—Spermatorrhœa, with debility of organs; Menstrual Colic, with vomiting.

Analogue.—*Coloc.*

51.—Drosera Rotundifolia—*Round-leaved Sundew.*

This plant is indigenous to elevated situations in Great Britain, and throughout Northern and Central Europe, and flourishes in mossy and turfy bogs. We prepare a tincture from the whole plant, at the commencement of flowering.

Leading Uses.—*Spasmodic Cough; Whooping-cough* (the *best* remedy after *Acon.* and *Bell.* in uncomplicated cases); *Phthisis Pulmonalis*, with *spasmodic Cough*, profuse expectoration; Hæmoptysis, and gastric irritation, the cough inducing vomiting; Cough, generally of a *spasmodic* character, coming on suddenly, with retching or vomiting; nervous and sympathetic Cough. Cough with *tickling in the larynx*, and vomiting of food, or expectoration of bitter, yellowish mucus.

Other indications are, anxiety, mistrust, vexation at trifles; headache when stooping but disappearing when walking, vertigo, nausea, waterbrash; frequent desire to urinate, with scanty urine.

ANALOGUES.—*Ac.-Nit.*, *Ipec.*

52.—Dulcamara—*Bitter Sweet—Woody Nightshade.*

The name is derived from *dulcis* (sweet), and *amarus* (bitter), owing to the transition of tastes which the plant yields. We employ the young branches and leaves at the time the plant commences flowering. It is found throughout Europe in hedges and thickets.

Dulc. is especially adapted to individuals who are extremely sensitive to atmospheric changes.

LEADING USES.—Various affections resulting from *damp or a thorough wetting*, such as cold in the head, with stuffing in the nose, worse on going into cold air, short hacking cough, difficult expulsion of phlegm, nausea; *Diarrhœa* and *Dysentery* with colicky pains, greenish, watery, or bloody stools; Catarrh of the bladder, with fœtid smell of the urine; muco-purulent secretion and strangury; suppresion of the Menses in damp cold weather; flow retard and profuse; Catarrh of the sexual organs from exposure to cold or damp; Leucorrhœa from same cause; itching and stinging *eruptions;* glandular enlargements about the neck; mild *Rheumatism*, with pains worse during rest, and relieved by movement, and other conditions following a *cold.* If taken *immediately* after exposure to damp or wet, *Dulc.* will often prevent the development of a cold.

53.—Eupatorium Perfoliatum—*Boneset.*

The habitat of this plant is the whole of North America. We prepare a tincture from all parts of the plant when it is in flower.

LEADING USES.—*Intermittent Fever.—Bone pains;* bilious

Fever; Influenza; bronchial Catarrh; Cerebro-Spinal Meningitis; dropsical swellings of the legs.

Fevers.—In *Fevers* of an *Intermittent* type there is generally sickness on the night preceding the attack—the chill beginning in the morning, thirst before the chill, and continuing during that stage and the succeeding one of heat; bilious vomiting during the paroxysm, the hot stage going off with slight perspiration, and sleep very restless during paroxysm; liquids, especially water, disagree; pain in all the bones as if broken. Cannot lie still, though desirous of doing so. Not relieved by motion.

In *Fever* of a *Bilious or Remittent* character there is intense headache, with soreness of the scalp and eyes, redness of the face, nausea, and vomiting of bile; tenderness of liver; inability to bear anything tight round the waist; constipation; high-coloured urine; great prostration.

Catarrhal Symptoms.—Fluent coryza, sneezing, hoarseness, cough with soreness of the chest, difficulty of breathing, obliging the patient to lie with the head high, with aching and soreness in all the limbs.

Analogue.—*Bry.*

54.—Eupatorium Purpureum—*Queen of the Meadow.*

A tincture is prepared from the fresh root, which is found in the low, swampy grounds of America.

Leading Uses.—Diseases of the *Genito-Urinary Organs.* Diabetus insipidus; Dysuria; Chronic Inflammation of Bladder; Strangury from irritability of the mucous membrane; Sterility; Impotence; Amenorrhœa and Dysmenorrhœa.

Genito-Urinary System.—Weakness and vesical irritation of these organs; frequent micturition with cutting, aching pain in the bladder; greatly increased discharges of watery urine, or urinary deposits, or mucous sediment; strangury from uterine displacement; profuse and watery Leucorrhœa; Amenorrhœa from weakness; Impotence from debilitating causes.

Intermittent Fever.—The chills begin in the back and spread upwards and downwards; violent shaking with only

slight coldness; thirst and bone-pains during chill and heat; perspiration on upper part of the body. Vertigo.

ANALOGUES.—*Canth., Ferr.*

55.—Euphrasia Officinalis—*Common Eye-bright.*

The names given to this pretty, unassuming plant in different countries, and during several centuries—"eye-bright," "eye-comfort," "spectacle-breaker," etc.—all indicate its specific uses in restoring and strengthening the vision.

LEADING USES.—*Simple or Catarrhal Conjunctivitis*, with *abundant watery secretion*, sensitiveness to light, and irritation of the frontal sinuses and of the lining of the nose, with sneezing, and copious watery discharge; *Hay-fever;* smarting or stinging in the eyes—the effects of light or of cold air; Catarrhal Inflammation in the first stage of Measles; simple *Acute Inflammation* of the eyes; chronic sore eyes; *Amaurotic* conditions from suppressed Nasal Catarrh; Strumous Ophthalmia (alt. *Sulph.*); specks on the cornea. The remedy may also be applied topically as a lotion—ten or twelve drops in a wine-glassful of water.

ANALOGUES.—*Arg.-Nit., Merc., Puls., Sulph.*

56.—Ferrum—*Iron.*

This metal forms an important constituent of the blood and other parts of the animal organism. In homœopathic practice, we use either the filings of pure metallic iron, prepared by trituration, or the Acetate of Iron—*F. Aceticum*—which is a convenient solution. Other supplementary preparations are also used—*F. Iodidum, F. Muriaticum, F. Redactum*, etc. We generally use the last-named preparation.

PATHOGENETIC EFFECTS.—The first effect of iron may be to cause an apparent stimulation of the vital functions, but the physical condition of those who live near iron springs proves that ultimately iron possesses debilitating properties. We find these people tainted with chronic diseases more than

almost any other, even when their habits of life, diet, etc., are otherwise unexceptionable. A general or partial Debility bordering upon Paralysis, certain violent pains in the extremities, various affections of the abdominal viscera, vomiting of food day and night, Phthisis, Cough with hæmorrhage, want of animal heat, menstrual suppression, Miscarriage, Impotence, Sterility, Jaundice, and other Cachectic symptoms, prevail among them.

Leading Uses.—*Anæmia*, *Chlorosis*, and associated ailments.

Nervous System.—Neuralgia; Chorea; Hysteria, with Anæmia or uterine obstructions.

Circulatory System.—Congestive Headache; Headache following loss of blood; Epistaxis; languor; Dropsy; cold hands and feet; Chilblains and Sores in leuco-phlegmatic constitutions.

Respiratory System.—Phthisis; Hæmoptysis, with a tickling cough: Pneumorrhagia.

Digestive System.—Loss of appetite, coated tongue (white or yellow), oppression and fulness of the stomach and bowels, after eating, frequent vomiting of food, Constipation with ineffectual urging, or chronic Diarrhœa with slimy, even bloody stools, and straining; colliquative Diarrhœa; Lienteria; Ascarides; Prolapsus Recti in anæmic children.

Genito-Urinary System.—Catarrh of the bladder; involuntary urination of children *during the day;* Impotence; Sterility; Spermatorrhœa; Amenorrhœa with Anæmia; Menstruation too late and too scanty, with pale watery blood; Leucorrhœa; uterine displacements, including retroversion and prolapsus.

Analogues.—*Mang.*, *Glon.*, *Canth.*, *Sabi.*

57.—Ferrum Phosphoricum—*Phosphate of Iron.*

Leading Uses.—Debility of children with failing appetite, and when from being sprightly, boyish and gay, they become dull, languid, and listless, refusing to join in out-door amusements that were previously much enjoyed. Pain in the fore-

head or stomach; tendency to Constipation: slightly furred tongue; but no evidence of worms, or other disease. Although the flesh remains firm, there is loss of weight and strength. *Ferr.-Phos.* not only improves the strength, but helps to increase the bodily development in a manner that no other remedy does, and if the bowels are confined, it brings them into proper order. It is also valuable in *diurnal Enuresis* depending on irritation of the neck of the bladder, relieved when the pressure of the urine is taken off by recumbency.

Iron and Sulphur.—The differences between the indications of *Ferr.-Phos.* and *Sulph.* are, briefly, as follows:—If the flesh is fairly firm, the complexion delicate, and the hair light and curly, *Iron* is indicated; but if, on the other hand, the complexion is *dark*, the muscles *flabby*, the hair long and lank, and the skin moist, then we have our remedy, *cæt. par.*, in *Sulph.* (*Dr. Cooper*).

Analogue.—*Sulph.*

58.—Gelseminum Sempervirens—*Yellow Jessamine—Woodbine.*

One of the most beautiful climbing plants of the Southern States (America), ascending lofty trees, and forming festoons from one tree to another, and, in its flowering season, in the early spring, scenting the atmosphere with its delicious odour. We make a tincture from the root. The English Woodbine, or Honeysuckle, is quite a different plant.

General Uses.—Affections of the *nervous* and *muscular* system, causing extreme muscular relaxation and loss of power without complete stupor or delirium. Its action seems to come between that of *Acon.* and *Bell.*; and in some respects it is very similar to *Chloroform.* It is useful in acute pain in the muscles, as from long-continued exertion; the head-symptoms arising from heart-disease; Cerebro-spinal Meningitis: *Scarlatina Simplex*, especially in children, with great restlessness, tendency to remittency, and when *Acon.* and *Bell.* fail to bring out the eruption full and bright; simple fevers of women and children when *Acon.* is not sufficient, or when there is a condition of the brain beyond the reach of *Acon.*, yet not

demanding *Bell.; Infantile Remittent Fever*, and other Fevers having a *remittent* character, the evening exacerbations passing off without perspiration, and without dyspeptic symptoms; children's Fever characterised by cold extremities, headache, languor, fatigue, want of rest, sleepiness, crimson face while asleep, mumbling in sleep, half-waking, gentle perspiration during sleep, dried on waking, little thirst; nervous Fever, inward Fever, etc., without intestinal lesion; Measles in the incipient stage, with chilliness, thin watery discharge from the nose, Hoarseness, etc.; tendency to Convulsions in children about the time of the eruption in Fevers; feverish conditions with great restlessness. In large doses, *Gels.* so paralyses the muscular system, that while the patient is fully conscious, he lies utterly powerless to open his eyes or his mouth; hence it is very useful in some local Paralyses.

Nervous System.—Nervous rigors with chattering of the teeth, and shivering, *without chilliness*, from fright, mental emotion, or Hysteria; Neuralgia, with nervous twitchings, with tearing, flashing, sharp pains along the track nerves; feeling of lightness in the body; aches and pains in the back, shoulders, neck, etc., from spinal congestion or irritation; excessive irritability; causeless nervous excitement of hysteric patients; semi-stupor, languor, and prostration from night-watching, etc.; sleeplessness and mental apathy of drunkards; hysterical insensibility and lock-jaw; Catalepsy; spasm of the glottis; *Spasmodic Croup*, when *Acon.* fails, or the brain is involved; Coma, and Apoplexy from intense passive Congestion; sleeplessness from mental excitement; drowsiness in hot weather, when not arising from deranged stomach or liver.

Head.—Passive, venous cerebral congestion, with dull Headache and Vertigo; Hemicrania — dim sight, double vision—and great sensitiveness to all sounds; nervous Headache—the pain commencing in the neck and spreading thence over the whole head, or located in the occiput, and relieved by movement or by reclining the head on a high pillow; sudden Headache, with dizziness, heaviness, dulness, and a state of semi-stupor; giddiness on standing or on moving the head; Sunstroke with similar symptoms; Brain-fever, when *Acon.* fails.

Eyes, etc.—Heaviness of the eyelids; *Ptosis*, caused by congestion of the brain; weakness of sight from over-exertion, with *dimness, dryness, and double vision;* heaviness in the head; paralytic Squinting; Amaurosis, from congestion of the brain, with dilated pupils, or from worms, or from overdoses of *Quinine*, with black spots before the eyes; "thirst for light." Roaring in the ears, with sudden Deafness.

Circulatory System.—Excessive action of the heart from functional causes, and palpitation, with heavy throbbing. Heart seems as if it would cease to beat unless the patient moves constantly; with fear of death; affections of the head and eyes from heart-disease; coldness of the wrists and hands; hot, dry hands, especially the palms.

Respiratory System.—Nasal Catarrh—discharge of watery fluid from the nose, with Hoarseness, Cough, soreness in throat and chest; spasms of the glottis, and Spasmodic Croup; inspirations are prolonged, and expirations sudden and forcible; spasmodic affections of the throat, as in Hysteria; Paralysis of the glottis and other organs of the voice, whether or not after Diphtheria: Aphonia, from Catarrhal Paralysis; affections "from relaxation from the return of hot weather after winter;" bronchial Catarrh from soreness of large bronchi; evening lassitude, feverish, drowsy feeling, and rough Cough; acute Bronchitis and Pneumonia in first stage, when there is not the excitement calling for *Acon.*

Digestive System.—Pure nervous Toothache from cold—a drop of the tincture may be applied to the tooth; painful dentition, with sudden loud outcries, pulsating fontanelles, uneasy, heavy sleep, exceedingly tender gums, and feverishness; Convulsions after dentitional or digestive irritation; sore throat with pain shooting up to the ears, and Deafness; cramps and spasmodic conditions of the stomach; congestion of the stomach—sense of a heavy load, with tension, and dull pain; emptiness, "goneness," or false hunger—a gnawing sensation. Colic, pinching in transverse colon, commencing immediately after starting on a walk, but getting better when warm with walking. Diarrhœa, with bilious, papescent stools, much flatulence, and excess of nervous prostration; Dysentery, with inflammatory symptoms, from passive con-

gestion of the liver, inducing languor, drowsiness, dulness or depression, headache, dimness of sight, etc.; Jaundice.

Urinary System.—Enuresis in children and old persons, from paralysis of the sphincter; spasm of the bladder; spasm of the ureter from the passage of a Calculus.

Generative System.—Involuntary emissions *without* erections; flaccidity and coldness of the genitals; Gonorrhœa with priapism and Urethritis; seminal weakness from emotional, or local congestive, causes; some cases of Spermatorrhœa and spinal exhaustion, from Self-abuse; Scrotum very much relaxed and continually perspiring. Congestive Amenorrhœa from cold; neuralgic or spasmodic Dysmenorrhœa; false pains, and after-pains; simple Menorrhagia, without other symptoms; spasmodic Gastrodynia of pregnant women; *rigidity of the os uteri;* puerperal Convulsions.

Skin.—Simple Erythema and Erysipelas, with slight Fever; evanescent eruptions resembling Measles.

Analogues.—*Agar.*, *Coni.*, *Opi.*

59.—Glonoine—*Nitro-Glycerine.*

A preparation of Glycerine with Nitric and Sulphuric Acids. While of much service in excavating, its great explosive properties render it extremely perilous; many serious accidents having occurred through the least mismanagement in the transit or storage of the drug. In the human body, it acts as quickly as Prussic Acid.

Leading Uses.—Severe congestive throbbing, bursting headache, with increased action of the heart and arteries, and sometimes nausea and vomiting.

The prominent symptoms are: *Congestive headache, fulness, tightness,* and *Vertigo; Sunstroke,* with sudden falling down, violent dizziness and distress; congestive headache at the climacteric period and in Amenorrhœa from suppression; Neuralgia, and Puerperal Convulsions, with violent cerebral Congestion; *nervous palpitation,* as from fright, Hysteria, etc.; *rush of blood,* with throbbing in the arteries of the neck, quickened pulse, etc.

Analogue.—*Bell.*

60.—Graphites—*Black-lead—Plumbago.*

This name is from the Greek (*grapheo*, I write), because the mineral is used for writing with. We first make triturations.

Leading Uses.—Unhealthy condition of the *skin.* Chronic *cutaneous eruptions*, Ulcers, and Erysipelas; cracks and excoriations; tetter. *Constipation*, with large and knotty stools, co-existing with a dry harsh skin. Delayed and scanty menses, especially with an unhealthy state of the skin, and constipation; swelling and indurations of the testicles; Hydrocele.

Analogues.—*Lyc.*, *Plumb.*

61.—Hamamelis Virginica—*Witch-hazel.*

The habitat of this plant is throughout North America. We make a tincture from the leaves during summer, and the bark after the fall of the leaf.

Leading Uses.—*Varicosis*, *Phlebitis*, *Hæmorrhage*, and other affections of the *venous* system.

Head.—Headache, fulness, dull pain, and crowding pressure in the forehead and between the eyes, from venous congestion, especially when leading to Epistaxis; blood-shot eyes from Whooping-cough; inflammation of the eyes; bleeding from the gums; bleeding after dental operations.

Circulatory System.—Varicose veins, not ulcerated (internal and external use); varicose condition of the throat, the veins looking blue, with uneasy sensation in the parts, pain, and hawking up of mucus and blood; *Inflammation of the veins*, especially if associated with a varicose condition. Distended veins from Rheumatic Gout (strong tincture as a paint). Enlarged veins, with Menorrhagia of black clots (also *Crocus* 1x). *Phlegmasia Alba Dolens.* It has a distinct relation to the coats of the veins. Blue stage of Chilblains.

Digestive System.—Painful and *bleeding Piles*, with sensation as if the back would break off, for which it is a prime remedy; intestinal hæmorrhage; Dysentery, when the quantity

of dark blood is a more prominent symptom than the straining; Hæmatemesis, etc., or Varicosis, with Constipation.

Genito-Urinary Organs.—*Ardor urinæ;* Hæmaturia, irritable bladder, and Phimosis; Neuralgia of the testes and ovaries; ovarian disease, with pain in the loins, ardor urinæ, etc.; vaginal Leucorrhœa, with relaxation of the mucous membrane, etc.; *vicarious menstruation;* persistent uterine discharges. Recent Varicocele.

Trunk and Extremities.—Lumbago; pain, lameness, soreness in moving, stiffness of the small of the back; crick in the back; pain along the spine, consequent on strain or injury.

Hæmorrhages.—Hæmorrhage from the *nose*, mouth, cavity of an extracted tooth, *stomach*, *lungs*, *bowels*, *bladder*, *uterus*, or *anus*, when the blood is *venous*, steadily flowing in a dark stream; hæmorrhage with asthenia or anæmia, or from asthenic tendency.

Injuries.—Burns and scalds; it is a favourite application for scalds of the tongue and lips from hot drinks; *Ecchymosis* from a bruise; Excoriation; Cuts with hæmorrhage; the stings of insects.

External Uses.—As a local application for external *Piles*, or any bleeding surface, it is probably unequalled; as also in *Varicosis*, either simple or associated with Rheumatism or Gout. In bruises it is inferior to *Arn.*, but forms an efficient substitute when a tendency to Erysipelas renders *Arn.* inadmissible. The tincture or extract may be used, either pure or diluted: by many the extract is preferred: one part of the strong tincture to four or five of water. It is also recommended for inhalation in *bleeding of the lungs:* a drachm of the strong tincture to a pint of *hot* water.

Analogues.—*Puls.*, *Mill.*, *Arn.*

62.—Helleborus Niger—*Black Hellebore—Christmas-rose.*

The tincture is prepared from the fresh root.

Leading Uses.—*Dropsies. Hydrocephalus* from a diseased condition of the serous membranes, or following Sunstroke, or as a sequel to an eruptive disease, or from the retrocession of

Mumps, etc., with pain in the head, drowsiness, stupefaction, paleness of the face, and slight convulsive movements. Constant movement of the arms during sleep (contrary to *Hyos.*). In Hydrocephalus, however, it must be regarded only as an ally to such deeper constitutional remedies as *Calc.* and *Sulph.*, especially in scrofulous patients. *Dropsy* of the chest, abdomen, and scrotum, and general Anasarca, resulting from Scarlatina, Intermittent fever, etc. Nephritis. Puerperal Mania, and other mental derangements of women.

ANALOGUES.—*Apis*, *Ars.*

63.—Helonias Dioica—*False Unicorn.*

The plant is indigenous in the lowlands of the United States. Tincture is prepared from the root, or trituration from Helonin.

LEADING USES.—Loss of tone in the uterine organs, with deranged stomach. As a *Uterine tonic*, we have repeatedly proved it to be a most precious remedy, having employed it for Amenorrhœa, Prolapsus uteri, Menorrhagia, Sterility, Leucorrhœa, *Pruritus Vagina*, etc. At the same time, it improves digestion and assimilation, and its action on anæmic patients very much resembles that of *Ferr.* Pain and stiffness in the sacral region, from male or female sexual disorders, often supposed to be of a rheumatic character, are curable by *Helon.*

ANALOGUES.—*Ac.-Phos.*, *Ferr.*, *Stann.*

64.—Hepar Sulphuris Calcareum—*Hepar Sulphur—Liver of Sulphur.*

A preparation of the calcareous matter of the inner *oyster-shell* and *Sulphur.*

LEADING USES.—Affections of the *glands*, *respiratory mucous membrane* and *skin; suppurations;* the *Scrofulous* and *Syphilitic dyscrasiæ;* and the evil effects of *Mercury.* Chronic glandular swellings, especially when Abscesses form; scrofulous disease of joints; ulcers, and scaly eruptions due to Syphilitic infection; suppuration from any part, in scrofulous persons. It

promotes and regulates suppuration in a remarkable manner (second only to *Sil.*), but is generally required at earlier stages than *Sil.*

Head, Eyes, etc.—Headache at the root of the nose; chronic periodical Hemicrania, with boring pain; ulcers of the conjunctiva which are apt to return; *Staphyloma*, Blephar-Ophthalmia, purulent Ophthalmia, affections of the *cornea*, chronic sore eyes with frequent inflammation and free discharge, in scrofulous children; scrofulous Ozæna and Otorrhœa.

Respiratory System.—Hoarseness, with wheezing breathing; hoarse cough following Measles; membranous Croup; Catarrh of the larynx and trachea, with roughness and hoarseness, severe, deep, dry cough, particularly in the evening, and easily excited by exposure; "sensation as of a clot of mucus, or of internal swelling, when swallowing," and titillation in the throat; cough with those symptoms, at first dry, afterwards moist, and yielding tenacious mucus; chronic Bronchitis; Phthisis Pulmonalis in the scrofulous.

Digestive System.—Acute Quinsy; swollen tonsils; Salivation, spongy gums, and other conditions of the mouth, from allopathic doses of *Mercury;* chronic Dyspepsia, with frequently and easily deranged stomach; chronic congestion of the liver, with abdominal distress, impeding free respiration, and causing a sense of oppression; obstinate constipation, from a congested condition of the rectum, and Piles, from engorgement of the liver.

Skin.—Unhealthy, and chapped or cracked skin; fissures in the palms of the hands; *Abscesses, Whitlow, Boils*, and threatened *Carbuncles;* chronic Erysipelas; chronic Herpes; recurring suppurations of the glands in scrofulous persons.

Analogues.—*Sulph., Calc.-C., Merc., K.-Bich.*

65.—Hydrastis Canadensis—*Golden Seal.*

Hydras. grows in different parts of the United States and Canada, and has long been known to the Indian tribes for its medicinal virtues and beautiful yellow dye. Its rugged root is the part used for officinal purposes. In administration it is

employed externally as a lotion or a gargle ; internally in the form of trituration or tincture, in low and high attenuations. As a rule a watery preparation is best.

Leading Uses.—The *mucous tracts*, the *glands*, and the *skin ;* especially *chronic* disorders.

Eyes, Ears, and Nose.—*Catarrhal Conjunctivitis*, after the acute stage has passed (as a collyrium), obstinate catarrhal inflammation, and ulceration. Nasal Catarrh ; constant discharge of *thick white mucus* from the nose, obstruction of the passages, and Coryza with frontal headache. Ozæna ; diphtheritic affections of the nose. Whirring roaring in the ears ; *Tinnitus Aurium ; Otorrhœa* with thick mucus (a weak solution as an injection).

Digestive System.—Aphthous condition of the mouth and throat ; yellow stripe down the middle of the tongue, or even over the whole of the organ, which feels large ; sticky mouth. Simple ulceration of mouths of children, in mercurial sore mouths, and in *Stomatitis Materna* (as a wash). A peculiar sore throat attending Dyspepsia, and arising from extension of the irritation of the stomach. Diphtheria : ulcerous sore throat. Putrid throat in malignant Scarlet fever (as a gargle or paint). Acetous or atonic Dyspepsia ; great sense of sinking and prostration of the epigastrium, with violent and long-continued palpitation of the heart. *Catarrhal Diarrhœa ;* chronic mucous flux of the intestines (*Blenorrhœa*) ; erosion, chronic Ulceration, etc., with defective absorption ; flatulent Colic. Dysentery ; mucous *Enteritis*, when of a catarrhal character ; *chronic* Enteritis, when the discharges are tenacious and slimy ; *Ulceration of the rectum ;* fissure and excoriation of the anus, Piles, etc. (As enemata.) *Simple chronic Constipation ;* especially in those who have resorted to a course of "opening medicine ;" or who, after an active life, have become sedentary ; *torpidity* of the bowels.

Genito-Urinary System. — Gleet, Gonorrhœa, incipient Stricture, Spermatorrhœa, Leucorrhœa, Aphthous Pruritus of the Vulva, inflammation and ulceration of the internal coats of the bladder, and the consequent debility. Injections of a solution of the *Sulphate* of *Hydrastis* are curative in Gonorrhœa after treatment of the acute stage by *Acon.* or *Gels.*

Glandular and Cancerous Affections. — Cancerous cachexia; cancerous Tumours in the breast; scirrhous Tumour; painful ulcerations.

Skin.—Ulcers, Lupus, Rhagades, and excoriations, especially in cachectic and enfeebled constitutions; *Eczema frontalis* by the margin of hair on forehead; excoriation of infants; sore nipples. Ulcerous conditions of any of the surfaces, especially if chronic and attended with debility. Catarrhal and ulcerated conditions.

Analogues.—*Nux V., Podoph., K.-Hyd., China, Sulph., Ars.*

66.—Hyoscyamus Niger—*Black Henbane.*

This plant is indigenous throughout Europe, growing in uncultivated places in the neighbourhood of farms, villages, etc. The herb may be recognised by its fœtid odour when pressed. We make a tincture from the herbaceous part of the plant. In cases of poisoning, there is more or less complete insensibility, loss of memory, use of wrong words, inability to collect the thoughts, low muttering delirium, frightful visions, extreme dilation of the pupils, hot (103°), dry skin, and loss of power and feeling in the lower limbs.

Leading Uses.—Functional diseases of the *brain and nervous system*, characterised by nervous irritability and over-activity of the sensorial functions.

Nervous System.—Delirium, without the congestion indicating *Bell.*, or the fury calling for *Stram.*; complete loss of sense, urine being passed unconsciously; delirium coming on with occasional fits of excitement, in which the patient tears at the bed-clothes, attempts to fling off everything, or makes motions as if he were at his employment; afterwards he falls asleep for some hours, waking at intervals with fits of excitement; delirium tremens; brain-troubles of children, not requiring *Bell.*; constant movement of arms during sleep (contrary to *Hell.*); excitement preventing sleep; mild delirium of Typhus, Enteric, and Puerperal fevers; Phrenitis; epileptic and hysteric convulsions, and Eclampsia. Fainting fits of Hysteria.

HEAD, ETC.—Squinting, Stammering, twitching in the face, and other choreic movements in children; giddiness and stupefaction, dull and haggard expression, excessive dilatation of the pupils, and loss of speech; eyes red, fixed, sparkling, convulsed; optical delusions; disturbance of the visual function—a tailor, under the influence of this plant, could not thread his needle, it seemed to have three points.

RESPIRATORY SYSTEM.—Nervous dry cough, *commencing or aggravated on lying down*, and relieved by sitting up; night cough of children or old persons; spasmodic, nervous coughs of children, aged, and hysteric persons, especially when from irritation of *elongated uvula*.

DIGESTIVE SYSTEM, ETC.—Vomiting from brain-disturbance; hysterical vomiting; painless Diarrhœa, especially in females; involuntary nocturnal urination.

ANALOGUES.—*Bell.*, *Stram.*

67.—Ignatia Amara—*St. Ignatius' Bean.*

The *Strychnos Ignatii* is a climbing bush, which, like the *Strychnos Nux Vomica*, grows on the islands of the east and south-east coasts of Asia. Although the two plants are of one family, the seeds of the former (from which the tincture is made) contain more strychnia than the latter, and there is a considerable difference in their respective therapeutic effects.

LEADING USES.—Nervous and digestive derangements.

NERVOUS SYSTEM.—*Hysteria*, *Chorea*, *Epilepsy* when occasioned by fright, and other *nervous disorders;* sensation in the throat as of a lump there (*Globus Hystericus*); epileptiform and other convulsive affections of children, as if from worms or fright; emotional disturbances from grief or fright; Hypochondriasis in the male; alternate gaiety and sadness; acute sensibility of the body; sleeplessness, and the consequences of *fright* or *grief* in persons of an exalted impressionability, especially women and children; excessive convulsive *yawning;* stiffness of the back from spinal irritation. *Sciatica*, when the patient is obliged to walk about to get relief, especially at night.

Head, etc.—Paroxysms of headache, with sensation as if a nail were pressed into the brain; weight at the back of the head, the patient being continually inclined to lean it back upon something for support; face-ache or tooth-ache, with crushing pain, or digging and soreness in the teeth.

Respiratory System.—Sensation as if a cold in the head were coming on, with aching in the forehead; nervous cough, with irritation in the throat-pit, in females; bronchial Catarrh of old persons where *Spasm* is a prominent symptom; constriction of the chest; difficult inspiration, with easy expiration; dyspnœa. Pain and anguish of the heart (not organic) from depressing emotions.

Digestive System, etc.—Indigestion, with great *nervous depression; flatulence;* distress in the stomach, and periodical spasms of hysteric persons; excessive perspirations during meals; feeling of weakness at the epigastrium; acute pain in the anus; Constipation, with frequent unsuccessful desire for stool, especially when it alternates with Diarrhœa; and Prolapsus Ani, in the aged and in children.

Genito-Urinary System.—Copious discharge of pale urine. Premature and profuse menstruation.

Analogues.—*Nux V., Cham.*

68.—Iodium—*Iodine.*

An elementary substance, chiefly obtained from incinerated sea-weed or kelp.

Leading Uses.—Scrofulous affections of the *glands;* scrofulous inflammation of the joints; Goître; Inflammation of the *lymphatic glands;* general emaciation, with colliquative sweats and diarrhœa; Hectic fever; wasting of the body from non-assimilation of the fatty elements of food, with a tendency to Consumption of the lungs, or, in children, of the *mesenteric glands;* scrofulous caries; irritation of the upper part of the respiratory mucous membrane.

Nervous System.—Tremblings, with emaciation; Chorea in scrofulous subjects, with exhaustion, wasting, etc.; Marasmus of children and females; mercurial wasting and tremor;

Paralysis from deficient innervation, with atrophy and loss of vitality, from care, want, etc.; despondency or great and lasting anxiety.

Head.—Pressure in the forehead and back of the head, with confusion, sense of gnawing hunger, followed by thin diarrhœtic discharges; chronic nervous headaches from stomachic derangement; congestive headache, with fulness, giddiness, drowsiness, etc., especially in old persons.

Eyes, Ears, and Nose.—Scrofulous Ophthalmia, with Photophobia, obscuration of vision, etc.; chronic *catarrhal Deafness* with, or following, glandular or throat affection; scrofulous or syphilitic Ozæna, with fœtor, loss of smell, etc.

Circulatory System.—Palpitation, with quickened pulse, and weakness, leading to fainting; fainting-turns; intermittent pulse; constriction about the heart and chest; thin condition of the blood and other secretions.

Respiratory System.—*Inflammatory Croup* (when membrane forms, *Iod.* should be administered internally and by inhalation); Croup preceded by hoarseness and dryness of the throat; chronic Laryngitis, with hoarseness, aching, and sore pains; paroxysms of cough with discharge of lumps of hardened mucus; laryngeal Phthisis; hoarseness, with fits of deep, dry cough; dry, hard, barking cough; chronic Bronchitis, with tearing and suffocating cough, tickling in the throat, constriction, burning sensation, wheezing, and expectoration of blood-streaked, or even purulent, mucus; chronic Pneumonia, with abscesses; tightness of the chest, with pressing, burning, and palpitation; cough with Hæmoptysis, wasting, and night-sweats; cough and phthisical symptoms following the disappearance of glandular swellings; *Phthisis Pulmonalis*.

Digestive System.—*Salivation*, especially mercurial, with disorganisation of the gums, paleness of the face, emaciation, and small quick pulse; salivation during pregnancy; unnatural hunger, with Indigestion and emaciation; diarrhœtic stools, and wasting, the food not being assimilated; thin, fœtid diarrhœa of scrofulous children, with distention of the bowels, pinching and cutting pains, etc.; Tabes Mesenterica, with cough, and hectic symptoms; disease of the pancreas;

congestion of the liver, chronic jaundice, etc., in the scrofulous, with wasting, especially when dependent on organic disease.

Generative System.—Atrophy or induration of the testes, with Impotence; Hydrocele. Amenorrhœa in girls having a phthisical tendency, emaciation, etc.; falling away of the breasts; Amenorrhœa in strumous patients, with oppressed breathing, palpitation, loss of appetite, costiveness, distention of the bowels, etc.; premature and profuse menses, or profuse, thin, watery discharge, with prostration, dizziness, frontal headache, etc.; Dysmenorrhœa with similar symptoms; Sterility, Metritis, and chronic Vaginitis, in the scrofulous; fœtid Leucorrhœa, with emaciation; inordinate flow of milk, which continues after weaning, with wasting; ovarian cysts, atrophy, etc.

Skin.—Chronic erythematous, papular, and pustular eruptions of scrofulous children; scrofulous ulcers; Lepra, with corresponding constitutional symptoms.

Glandular System.—Goître or Derbyshire-neck; its utility is restricted to simple enlargement of the gland. Swelling and induration of the cervical, salivary, and inguinal glands, and swelling of the glands in general. Enlargement of the liver. Bronchocele. Injections of Iodine have been successfully employed for curing the hydro-rachitis of *Spina bifida*.

Analogues.—*Merc.*, *Ars.*, *Brom.*, *K.-Bich.*

69.—Ipecacuanha—*Ipecacuanha.*

A creeping herbaceous perennial plant, growing plentifully in the wooded tracts of South America, particularly in Brazil. Its root is the part from which the tincture is prepared.

Leading Uses.—Inflammatory *irritation of the mucous surface* characterised by *unceasing nausea*, and frequent retching and vomiting. Paroxysmal or intermittent affections of the *respiratory system* and *stomach*, occurring especially at night; intermittent fever, with predominance of gastric symptoms at the commencement; hæmorrhages, especially Hæmoptysis.

Hahnemann esteemed *Ipecacuanha* an antidote to *Opium-*

poisoning, and it has been found of great value in weaning the system from the opium-habit (*Hughes*).

Head.—Hemicrania, paroxysmal, with fine stinging pains, soreness, and nausea.

Respiratory System.—Spasmodic sneezing, with bleeding, or running of watery fluid from the nose, and watering, redness, and smarting of the eyes. Spasmodic Cough, at night, with tickling in the larynx, retching, and vomiting of mucus; cough with pain in the umbilical region, as if the navel would be ruptured. *Whooping-cough*, during the *early* stage, with great accumulation of mucus and vomiting (alt. *Acon.*). Paroxysmal cough, with *Hæmoptysis;* bronchial Catarrh, with excessive quantities of mucus, causing vomiting in the effort to expel it. Croup. Sudden Hæmorrhage from the lungs in Phthisis; Hay-fever; Spasmodic Asthma, with anguish, deathly paleness, dread of death; nocturnal Asthma, coming on suddenly, with similar symptoms, cold extremities, ending in profuse expectoration of mucus.

Digestive System.—*Nausea and vomiting*, with abundant flow of watery saliva, qualmishness, sense of emptiness in the stomach, and *moist*, *yellowish*, or *white-coated tongue;* vomiting of pregnancy, with similar symptoms. Intestinal hæmorrhage which does not proceed from ulceration; *Hæmatemesis* (see also "Generative System"), with moist tongue and flow of saliva; vomiting of blood, mucus, or bile, of a greenish or blackish colour, with straining and retching; loss of appetite; oppression after food, want of tone in the stomach; spasmodic Cardialgia; Neuralgic and bilious Colic, with pinching and cutting pains about the navel; Diarrhœa, with nausea, vomiting, and bloody, or foul-smelling stools; *Dysentery*, with moist furred tongue, profuse discharge of mucus and greenish matter and *blood*, and *tenesmus;* autumnal Diarrhœa, with griping, straining, nausea, and vomiting.

Urinary, and Female Generative Systems.—Hæmaturia, with qualmishness and nausea in the stomach and bowels; thick, reddish urine. Sudden discharge of bright-red blood from the uterus, after labour, with sickness at the stomach, dizziness, headache, cold, pale face; Menorrhagia, with

similar symptoms; *Hæmatemesis* associated with *irregular menstruation* or the critical age.

Analogues.—*Ant.-T., Iris, Puls.*

70.—Iris Versicolor—*Blue-flag.*

Blue-flag is an aquatic plant common throughout the United States, which the Indians prize as a most powerful medicine. Tincture is made from the root; trituration from *Irisin.*

Leading Uses.—Affections of the gastric mucous membrane, also of the salivary glands, liver, pancreas and other glands, characterised by abnormal secretion, salivation, vomiting, and purging. Some scrofulous, mercurial, and syphilitic conditions; mercurial salivation; etc. *Iris* simulates *Mercury* to a remarkable degree, stopping short of the great disorganising effects of that drug. Nearly all the conditions for which *Iris* is applicable are characterised by unusual lassitude, prostration, and lowness of spirits.

Head.—Neuralgia of the right side of the face. *Sick-headache*, gastric or hepatic: in this affection *Iris* is a remedy of prime importance; the pain is generally in the forehead and right side of the head, is aggravated by rest and on first moving the head, but relieved by continual motion and in open air, and is often accompanied by vomiting of bilious matters or Diarrhœa, and lowness of spirits.

Eyes.—Simple inflammation of the eyelids from cold, especially when associated with Diarrhœa.

Digestive System.—Inflammation of the mouth and fauces, with or without ulceration, with burning, and Salivation, without fœtor; Salivation, etc., after Diphtheria; burning distress in the region of the stomach and pancreas; "pancreatic Salivation;" sour *vomiting*, with headache, acidity, and eructations; indigestion from defective pancreatic secretion, rendering the digestion of starchy and fatty foods imperfect; *severe flatulent Colic;* simple affections of the liver; *Diarrhœa*, with burning in the rectum and anus; Diarrhœa not followed by Constipation; looseness of the bowels, with

almost constant uneasiness and grinding in the bowels, discharge of fœtid flatulence and fæces; periodical Diarrhœa occurring at night; *English Cholera*, with great pain in the pit of the stomach, around the navel, or low down in the bowels; involuntary Diarrhœa, rice-water evacuations, cramps, and choleraic expressions of countenance; summer and autumnal Diarrhœa, with watery or bilious evacuations, and when *vomiting* is frequent.

Generative System.—Seminal emissions with amorous dreams; Spermatorrhœa, with lowness of spirits. Nausea and vomiting of pregnancy.

Skin.—Herpes, especially of the face; vesiculo-pustular eruptions on the skin and scalp.

Analogues.—*Merc.*, *Podoph.*, *Ipec.*, *Ant. Tart.*

71.—Kali Bichromicum—*Bichromate of Potash.*

A drug largely employed in dyeing, and prepared for medical use either as a tincture or trituration.

Leading Uses.—Affections of the *mucous membrane*, *skin*, *fibrous tissues*, *liver* and *kidneys*. Ophthalmia; *chronic Rheumatism*, with coldness of the affected parts, and shifting pains, especially on the left side, worse by standing, sitting, or lying down, or by pressure relieved by walking; papular, cutaneous eruptions; Syphilis, etc. It is probably seldom indicated in nervous or toxæmic conditions.

Eyes and Nose.—Ophthalmia, catarrhal or scrofulous, with redness of the conjunctivæ, œdema, and agglutination of the lids, and discharge of yellow matter. Inflammation and ulceration of the nose, with serous, purulent, and bloody discharge, sometimes coming away in tough, elastic plugs; Polypus of the nose (used internally and by olfaction).

Respiratory System.—Acute Coryza; Chronic Cold in the head; Influenza, without much nervous prostration; soreness of the fauces; Acute and *Chronic Bronchitis*, with *tough and stringy*, or purulent, *expectoration*, and Dyspnœa, especially when there is also indigestion; Croup with hoarseness and accumulation of mucus in the larynx, pseudo-membranous

formation; burning pain in the middle of the sternum; Cough, followed by violent dizziness, and *difficult expectoration* of *tough*, blood-streaked mucus; Cough worse on waking in the morning, and from food or drink.

Digestive System.—Ulcerated sore throat, with accumulation of a yellow, *tenacious*, stringy matter; Syphilitic sore throat, when the ulceration is not deep; Indigestion, from chronic gastric Catarrh, with *yellowish* coated tongue; Indidestion of great beer-drinkers or flesh-eaters, with weight at stomach *immediately* after eating food; nausea and vomiting, with sense of coldness in the stomach; ulceration of the stomach, with soreness and tenderness, dryness of the mouth, etc.; ulceration of the intestines; dull pain in the right hypochondrium, and whitish or greenish-yellow stools; suppression of urine following Asiatic Cholera.

Skin.—Pustular eruptions; ulcers of the legs; ulcers with dark centres and overhanging edges, especially of a *syphilitic* character; small flat pustular eruptions on the face, nose, forehead, and scalp; profuse perspiration.

Analogues.—*K.-Hyd.*, *Merc.*, *Ars.*, *Spong.*

72.—Kali Bromidum—*Bromide of Potassium.*

Leading Uses.—Depression of the nervous system; *Epilepsy.*

Nervous System.—*Deep depression of spirits;* profound melancholy; loss of memory; *delusions;* frightful imaginings at night; horrible dreams; night-terrors of children; Insanity; Puerperal Mania. Neurosis, involving the brain and accompanied by convulsions; *Epilepsy*, chiefly *grand mal*, especially occurring at or near the menses; Paralysis agitans; unsteadiness of gait; numbness, coldness, weakness, deadness, and other symptoms indicating disorder of the vasomotor nerves; Chorea; Tetanus; Infantile Convulsions; Delirium Tremens. Violent headache; nervous headache; heaviness, drooping, confusion, Vertigo. Incipient basilar Meningitis.

Eyes, etc.—Photophobia (as a collyrium); squinting after night-terrors of children; Restless eyeballs. Ringing in the

ears. Tongue pale and cold, or red and dry; hot, dry mouths of teething children.

Respiratory System.—Hyperæsthesia of the laryngeal nerves; uncomplicated Whooping-cough; uncomplicated Laryngismus stridulus; Diphtheria. Nervous cough during pregnancy; nervous Asthma; spasmodic Asthma of children; spasmodic Croup.

Digestive System.—*Odontitis* in children (applied locally); difficult dentition; suppressed salivation of teething children; loss of appetite; *vomiting* with intense thirst, during pregnancy, in Whooping-cough, of *drunkards; Cholera infantum:* autumn Diarrhœa; Colic in young children; Asiatic Cholera in the first stage; Constipation.

Genito-Urinary System.—Nephritis with convulsions; Diabetes Mellitus. Neuralgia, or spasm, of the neck of the bladder. Nocturnal emissions, with amorous dreams and erections; satyriasis; nymphomania; Chordee during Gonorrhœa; nervous menstrual ailments. Absence of sexual desire with impotence; sterility. Tabes dorsalis, resulting from sexual excess.

Analogues.—*Phos., K.-Hyd.*

73.—Kali Hydriodicum—*Kali Iodidum—Iodide of Potash.**

Leading Uses.—Secondary and tertiary Syphilis; chronic Rheumatism and Gout; weakness and stiffness of the joints following acute Rheumatism; catarrhal affections of strumous patients. Lead-poison.

Nervous System.—Acute and Chronic Hydrocephalus; Epilepsy and Paralysis of a syphilitic origin.

Eyes, Nose, etc.—Inflammation of the lachrymal gland,

* Iodides, whether of Potash, lead, iron, or other base whatever, when received into the stomach, are taken up by the absorbent vessels of the alimentary canal, and pass in the blood to the salivary glands, by which they are more freely excreted than by the kidneys, and are re-absorbed. This gastro-salivary circle, as it may be called, is not the only one. Metals move similarly in the entero-hepatic circle, passing from the liver into the intestine to be re-absorbed and repeat their course. Hence in cases of poisoning, cure is impeded unless this continuous circulation be anticipated by the aid of purgatives.

with mucous discharge; syphilitc Iritis; *fluent Coryza*,* affecting the mucous membrane of the eye and the nose, the eyes being red and swollen, and the discharge cool and not causing soreness (hot excoriating secretion indicates *Ars.*); Ozæna; chronic Deafness. Hypertrophy of the thyroid gland.

Digestive System.—Ulcers, swelling and cracks of the tongue; syphilitic Ulcers on the soft palate and tonsils; chronic Sore throat; sore or fissured anus of infants.

Skin.—Various forms of syphilitic and scrofulous chronic cutaneous disease,—Psoriasis, Lepra, Erythema, Lupus, Ulcers, etc.; Wens on the head.

Osseous System.—Periostitis from an injury, or of a syphilitic character; Syphilitic Nodes; swelling and caries of bones.

Characteristics.—The pains which *Iodide of Potassium* removes are almost always worse at night; *e.g.*, of Syphilis, chronic Rheumatism, etc. Massive doses produce Inflammation of the eye, and pain, tenderness, and gouty symptoms in the feet.

74.—Kreasotum—*Creasote.*

The statement of M. Teste, that the continued use of *smoked meat* destroys the teeth, and produces foul breath, costiveness, and a bad state of the body generally, coincides with the homœopathic uses of the drug.

Leading Uses.—Sympathetic and chronic vomiting; Toothache from decay of the teeth. *Kreas.* is most adapted to the ailments of delicate children.

Digestive System.—*Decay of the teeth*, and *Toothache* from that cause (compare *Merc.*); caries; *morbid Dentition*, especially when the teeth decay as they appear, and the patient is

* A correspondent in the *Lancet* expresses the difficulty he experiences in administering *Iodine* to a syphilitic patient, as the severe coryza and bronchial catarrh which it occasions render a suspension of the drug imperative. He administers from four to ten grains thrice daily, and inquires for a method of giving the drug without such severe physiological action! Dr. Allan, of Bedford, also reports two cases of severe coryza, occasioned by taking massive doses of this drug.

cachectic and troubled with Constipation (compare *Cham.*); mercurial salivation (as a gargle); obstinate Indigestion, with constant nausea and inclination to vomit, without actual vomiting, with a sense of coldness in the stomach; *sympathetic vomiting*, as in Phthisis, Cancer of the liver, kidney disease, Pregnancy, etc.; Diarrhœa and Dysentery, when the discharges are putrid; gastro-intestinal Inflammation; Diabetes Mellitus.

Generative System.—Menstruation too early, too copious, too prolonged, attended with buzzing and humming in the head, and hardness of hearing; menstruation intermittent. Foul vaginal discharges, malignant uterine ulcerations, premature menstruation with discharge of fœtid blood, nervousness, etc.; *foul, corrosive* Leucorrhœa; intermittent Lochia; persistent morning sickness; putrid-smelling lochial discharge; acrid discharge producing yellow spots on linen.

Skin.—Syphilitic eruptions. To Burns, Scalds, Chilblains, and foul Ulcers a lotion may be applied—one drop of pure *Kreas.* to about eighty of water.

Analogues.—*Carbo V., Petrol.*

75.—Lachesis—*Lachesis.*

The poison of the lance-headed viper (*Trigonocephalus lachesis*), a South American snake.

Leading Uses.—Prostration of the nervous energies as shown in the affections of women at the climacteric period; hysterical troubles; *irritable throat; traumatic gangrene;* some cases of chronic Constipation in females, and when there is alternate relaxation and Constipation; etc. The *left* side is chiefly affected.

Nervous System.—Globus Hystericus; spasmodic stricture of the œsophagus; suffocative fits of Cough.

Circulatory System.—Nervous palpitation from Heart-disease, accompanied by anxious, wheezing respiration, asthmatic Cough, tendency to vomit, etc. In some forms of *organic Heart-disease*, especially where nothing can be borne round the neck to touch it; *flushes*, with headache and sleeplessness;

burning pains in the top of the head, worse from heat; pains in the back; melancholy; etc.

Respiratory System.—Putrid sore throat; irritable throat; nervous sore throat with much aching. Tonsillitis, especially when it begins on the left side; *Bronchitis* with low vitality—desire to continual hawking, worse at night, with tough or tenacious mucus. Pneumonia with much Dyspnœa and general congestion.

Skin.—*Traumatic gangrene*, and skin and other diseases, in which, as in cases of the serpent's bite, the blood becomes tainted by the local affection; Erysipelas, Carbuncle, Pyæmia from Phlebitis; old and foul Ulcers of extremities; irritable Ulcer; Purpura.

Analogues.—*Crotalus*, *Naja*, *Ars.*

76.—Leptandra Virginica—*Black Root—Veronica Virginica.*

This perennial is indigenous throughout the United States, growing chiefly in limestone districts. Preparations are made by tincture from the fresh root, and by trituration from the dried roots, and from *Leptandrin.*

Leading Uses.—Diseases of the *Liver* and *Bowels;* Jaundice; Ulceration of the Bowels; Diarrhœa; Dysentery.

Nervous System.—Mental depression with drowsiness; *gone feeling;* weariness, languor; dull pain in the brow, or in the temples, worse by walking; aching and soreness of eyeballs.

Digestive System.—Coated tongue, with yellow streak in the centre, and flat taste in the mouth. Nausea, with deathly faintness at night; vomiting of bile; burning aching pain, worse after drinking cold water; *constant distress* and *sinking sensation at the pit of the stomach;* dull aching pain in the liver with burning in the back part of it and the spine; constant dull burning distress in the epigastric and hypochondriac regions; aching in abdomen, with rumbling and desire for stool; black, tarry, fœtid, copious stools, followed by clay-coloured stools in Jaundice; dark, greenish, papescent, watery or mucous stools, with feeling of weakness in bowels,

and distress in lower part of abdomen, worse by eating meat or vegetables.

Trunk and Extremities.—Sore aching pain in back with burning in spine; pain in shoulder and arm; feet and legs cold and numb.

Analogues.—*Bry.*, *Iris.*, *Gels.*

77.—Lycopodium Clavatum—*Wolf's-foot, Club-moss.*

We use the yellow powdery spores (Sporulæ Lycopodii), which cannot be wetted or dissolved, but which trituration renders a potent remedy.

Leading Uses.—Affections of the digestive, *urinary*, and respiratory mucous membrane, and of the skin, especially where there are mental and physical weakness, sallow complexion, loss of appetite, slow and depraved digestion, intestinal flatulence, and Constipation. *Rheumatic* affections. *Sciatica.*

Respiratory System.—*Chronic* Catarrh, and, perhaps, Bronchitis, with *much general weakness;* chronic Influenza; chronic superficial ulcerations, having a tendency to spread, in the throat, soft-palate, tonsils, and pharynx; it is more indicated when they commence on the right side and go to the left—contrary to *Lach.* Chronic Pneumonia, with purulent, foul-smelling expectoration; early stages of *Phthisis Pulmonalis*, when supervening on Bronchial Catarrh, with much free mucous expectoration of a saltish taste; Cough worse in evening, easier after expectoration, and attended by night-sweat of a sour or onion-like odour, and occurring most in axillæ.

Digestive System.—*Water-brash, Acidity, Heartburn;* for Water-brash, particularly in elderly lympathic persons, it may be considered almost specific. *Flatulence in the intestines*, with tympanitic distention of the abdomen; *Constipation* with canine hunger and torpor, sense of warmth and dryness of the bowels, and *gravel* in the urine; Enteritis of infants, from indigestible food; chronic congestion of the liver, with pain in the right side and back; burning pain

between Scapulæ; unconquerable sleep after dinner, followed by great exhaustion.

URINARY SYSTEM.—Frequent or painful urination, the urine being cloudy, depositing a sediment, and sometimes mixed with mucus and blood; excessive urination, disturbing the patient at night; Spasmodic Retention or Incontinence of urine in children; Strangury dependent on the presence of gravel or pus in the urine, or atony of the mucous membrane; *gravel* (lithic acid deposits).

SKIN.—*Intertrigo*; Porrigo favus; Plica polonica; chronic Inflammation of the skin; *Varicose Ulcers;* sallowness; cold extremities.

ANALOGUES.—*Bry.*, *Nux V.*

78.—Mercurius—*Mercury.*

There are several preparations of *Mercury*, the principal of which are—*M. Solubilis Hahnemanni*, the black oxide of Mercury, first prepared by Hahnemann; *M. Vivus*, quicksilver; *M. Corrosivus*, corrosive sublimate, or bichloride of Mercury; *M. Iodatus*, or *Biniodatus*, iodide, or bin-iodide of Mercury; and *Cinnabaris*, red sulphuret of Mercury. The general effects of all are so similar that we have thought it best to describe them under one signature—MERCURIUS. The main distinctions between different forms or combinations of the drug are pointed out at the end of the Section, and occasionally in the paragraphs.

LEADING USES.—*Hæmatic derangements*, including diminished fibrin, Ecchymosis and Hæmorrhage; *irritation* of the glands, the mucous, serous, and cutaneous tissues, and the lungs; "*mercurial tremor.*" *Unhealthy and liquified state of the blood*, the secretions being fœtid, the complexion sallow, the skin generally pale and dull, and the system liable to Ecchymosis, passive hæmorrhages and effusions; *cachectic conditions of the whole nervous system*, the mind losing its power, the patient becoming irritable, with trembling, wasting, and an ill-nourished appearance; the glands enlarge and tend to suppuration or disorganisation, the mucous

membranes and the skin are disposed to ulcerations, generally unhealthy, and the secretions from the former are abnormal and excessive, and the perspirations from the latter copious, and sour or fœtid.

Congestions of the liver, bowels, etc., accompanied by chills, and followed by *slight* fever, heat, dryness of the mouth and throat, restlessness, etc., aggravated in the evening and night. *Dropsy* of the extremities, and Ascites, when due to Jaundice, liver-disease, or general cachexia, with sallow, yellowish-greenish and cold skin, feeble and slightly hurried pulse, thick and foul-smelling urine, constipation, and dry, light-coloured fæces. *Rheumatism*, the pains being hard aching, or crushing pains in the bones, with coldness or chilliness, followed by slight fever; local Rheumatism, chronic or during Rheumatic fever, the parts perspiring freely without relief; Rheumatism, with profuse, sour sweats, not relieving the symptoms; sub-acute Periostitis in cachectic patients; *Scurvy.*

The following are general indications for *Mercurius. Impoverished, pale, sallow, or unhealthy appearance; bilious or liver derangement; Offensive breath;* impaired appetite; *liability to derangements of the mucous membrane*—Cold in the head, Inflammation of the eyes, Sore throat, Dyspepsia, Diarrhœa, etc.—*from a draught of air, unfavourable change of weather, etc.;* increased susceptibility to impressions; *sensitiveness* to cold and damp, with *chilliness;* in febrile conditions, the *fever* is slight, with somewhat quickened, soft, full, and easily compressed pulse, and the precursory chills are slight; the symptoms generally are *worse* in the evening and at *night*; there is *chronic perspiration*, especially at night, or clammy sweat on the least exertion; also weariness, coldness of the extremities, *depression of spirits* or enfeebled mental power, irritability, restlessness, etc.

Mercurius, however, is not adapted to patients who have been previously drugged with large and long-continued doses of Mercury; *Hep.-S.*, *Ac.-Nit.*, or some other remedy, is then more suitable.

Nervous System.—Trembling of the hands and feet, or of the body generally, in cachectic individuals, from exposure,

want, etc.; Imbecility, softening of the brain, Paralysis, Chorea, and Hydrocephalus, from previous impoverishment of the nervous system; syphilitic Paralysis; wakefulness at night, and disturbing dreams, with drowsiness by day; sleeplessness with beating at the pit of the stomach, profuse sweats, and depression of spirits.

Head.—*Headache from cold*, as in Catarrh, with sense of *tightness* round the head, irritation of the eyes, heaviness over the nose and in the jaw-bones, running discharge from the eyes and nose, chilliness; *rheumatic Headache*, with pains in the bones of the skull, tearing in the scalp, or sensation as if the skin were tightly drawn over the skull, pains in the forehead, hot face, cold hands, and general chilliness; *bilious Headache*, the head feeling full and tight, with sensitiveness, flushed, swollen, hot face, copious flow of saliva, vomiting of bile, etc.

Eyes.—Inflammation of the eyes from cold, with smarting and burning, agglutination of the lids, sensation as of sand in the eyes; scrofulous and syphilitic Ophthalmia; Conjunctivitis, Iritis, and Retinitis; chronic Inflammation and swelling of the meibomian glands.

Ears.—Otitis, with severe pain, discharge of fœtid pus, or pus and blood, buzzing and fluttering noises, worse at night; Earache, and partial Deafness, from cold, with much noise in, and muco-purulent discharge from, the ears, swelling of the glands, offensive breath, etc.

Nose.—Swelling and inflammation of the nose, going on to suppuration or ulceration, and discharging foul pus; formation of crusts in the nostrils; muco-purulent discharge from the nose; syphilitic Ozæna.

Respiratory System.—Cold in the head—"running-cold"—sneezing, lachrymation, tightness of the head, and chilliness; Hoarseness, with dryness of the throat; Cough, with yellow mucus or muco-pus, of a sweetish or saltish taste; dry, hacking, shaking Cough, with dryness and tightness in the chest, worse at night, relieved for a time by drinking cold water, and with a sense as though the cough would be altogether relieved if the parts could be lubricated. Dr. Small states that no remedy acts so promptly and satisfactorily in

removing a hoarse cough, with much tickling in the larnyx, as *Merc.-V.* 3x. It is also excellent for the cough of Chronic Bronchitis and Consumption, with similar symptoms; expectoration of muco-purulent matter and blood, in cachectic patients, and following Scarlet fever.

Digestive System.—*Mouth, etc.*—Inflammation and ulceration of the mouth, tongue, fauces, and tonsils, with swelling of the glands, and slight fever; Sore mouth of nursing women; Thrush; Cancrum Oris; low inflammation and swelling of the tongue; Scurvy, sponginess and bleeding of the gums; cracks at the corners of the mouth; coppery or brassy taste, or foul taste, whitish or yellowish coating on the tongue, slimy state of the mouth, and Offensive breath. For Sore mouth with deep painful fissures or ulcers, *Merc.-Cor.* 3x is an excellent remedy. Salivation, simple, or in pregnant women; Mumps; swelling of glands after Scarlet fever. *Teeth.—Toothache*—the teeth are *loose* and feel *sore*, the gums swell and are sensitive, the pains are throbbing or jerking, *worse at night*, accompanied by *Salivation*, and often perspiration, and a general sense of *chilliness* (for this condition, described as Inflammation of the Peridental membrane, one grain of *Merc.-V.* 3x trit. every two or three hours, on the part affected, is very efficacious); Gum-boils, with similar symptoms. *Throat.*—Sore throat, with *aching* pain which makes swallowing difficult, or with pain as if a sharp body were sticking in the throat, with dryness, and, occasionally, a sense as of hot vapour rising in the throat; low form of, or chronic, Sore throat, with pale or *bluish-red swelling*, great sense of dryness, hawking of tenacious glassy mucus, and tendency to ulceration; syphilitic Sore throat, with similar symptoms; sore, ulcerated, putrid, gangrenous throat of Scarlatina Anginosa, with *swelling* of the glands. *Glands.*—Swelling and induration or suppuration of the parotid, sub-maxillary, or sublingual glands from cold, with soreness and heat, and sometimes Salivation; Mumps. *Stomach.*—Burning in the pit of the stomach, with soreness, oppression after food; Dyspepsia, from torpor of the liver, with bilious vomiting, Constipation, offensive urine, depositing brownish sediment; Acute Gastritis. *Pancreas.*—Fulness in the left

hypochondrium, with burning pain and tenderness in the region of the pancreas, and increased secretion from the organ—frothy and watery Diarrhœa, or whitish, tough, and greenish evacuations. *Liver.*—Chronic Congestion, enlargement, and induration of the liver, with aching, dull pain, oppression, soreness, uncomfortable heat, oppressed breathing, the patient being unable to lie on the right side, and general bilious symptoms; torpid liver, deficient secretion of bile, pale, costive, and offensive motions, loss of appetite, depression of spirits; Cirrhosis; Chronic Jaundice, with Constipation, pale and dry fæces, deep-yellow urine, soft and feeble pulse; simple *Jaundice, especially in children. Bowels.*—Vitiated, slimy, offensive Diarrhœa, excoriating the anus, especially in children; watery Diarrhœa from cold, with heat and flatulence, and sensation as if the bowels were loose in the abdomen, chilliness, Headache, foul taste, Salivation, debility; bilious Diarrhœa, with green, dark-brown, or excoriating evacuations, distention and soreness of the bowels; watery Diarrhœa, and emaciation; Diarrhœa of infants, the motions being green, or like stirred eggs, with flatulence, etc.; Dysentery with discharge of bloody mucus, *tenesmus*, chalky sediment in urine, and preceded by chilliness, colic, distention of abdomen, etc. For Dysentery, *Merc.-Cor.* is most effectual. Inflammation of the cæcum, colon, and rectum, with ulceration, pains in the hip and sacrum from Hæmorrhoids, Dysentery, etc. For *Cholera Infantum*, with frequent white watery stools, straining, and thirst, nausea, etc., *Merc.-Dulcis* 3 acts best. Constipation, following bilious Diarrhœa, the fæces being dark-brown or green, lumpy, and covered with mucus; or Constipation, with an occasional attack of bilious Diarrhœa. *Anus.*—Soreness of the anus, sharp, sticking pains, with oozing of serous fluid; white Piles. Ascarides and lumbrici in patients having the characteristic cachexia indicating *Merc.* Peritonitis, with effusion.

Urinary System.—Nephritis, non-desquamative; Albuminuria; suppression of urine from acute inflammation or congestion; frequent and painful urination.

Generative System.—Inflammation of the mucous mem-

brane of the glans penis; swelling of scrotum, with Priapism; coldness and shrinking of the genitals; Spermatorrhœa, and Sores; incipient buboes. Purulent and corrosive Leucorrhœa, Gleet, in cachectic patients; Gonorrhœa, Chancre; syphilitic and prolapsus of the vagina, with heat, pain, and soreness; profuse menstruation from liquefaction of the blood, in patients presenting the *Mercurial* cachexia—general weakness and wasting, œdema, coldness, paleness, short breath, etc.; sore breasts in similar patients.

Skin.—Chronic, sweating, sour or fœtid; perspiration on the least exertion; vesicular and pustular eruptions; cracking of the hands; Porrigo of the scalp; scrofulous and syphilitic eruptions and Ulcers; Impetigo, Rupia, and other destructive conditions; nightly itching or fine biting sensations without eruption (from approaching Jaundice).

Different Preparations of Mercurius, and the Diseases for which they are especially adapted.—

Merc.-Biniodatus. — Tonsillitis with ulceration; Goître; glandular swellings; also when such swellings occur during, or follow, Scarlet fever; chronic Bronchitis in the strumous; Polypus of the nose; chronic Catarrh.

Merc-Corrosivus.—Ophthalmia, Gastritis, Enteritis, Dysentery, liver-disease, Peritonitis, urinary affections, Gonorrhœa; Impetigo Capitis; some of the syphilitic eruptions.

Merc.-Sulphuratus Ruber—Cinnabaris.—Chronic Gonorrhœa; Gleet, Chancre, and enlargement of the inguinal glands.

Merc.-Solubilis and *Merc.-Vivus* are prescribed by many physicians indifferently, as the effects of each are nearly identical throughout. It was the *Merc.-S.*, however, which was proved by Hahnemann.

Analogues.—*Ars.*, *Iod.*, *Phyto.*, *Podoph.*

79.—Mezereum—*Daphne Mezereum.*

The common Mezereon is found in hilly woods over nearly the whole of Europe and Russian Asia. The bark, collected before the flowering, is employed in the preparation of tincture.

Leading Uses.—Diseases of the Bones and Periosteum of

rheumatic, syphilitic, or mercurial origin; Caries of the Bones, Periosteal Toothache, Neuralgia of the face, Earache. In diseases of the skin—Eczema, Tinea Pityriasis, Tinea Capitis, Pityriasis Versicolor, Crusta Lactea, Zona; Bleeding Ulcers. Deafness from suppressed eruptions, with thickening of the Membrana Tympani.

Respiratory System.—Cough as from tickling in the larynx, worse in the evening till midnight; expectoration of yellow tough mucus, tasting salt in morning; Whooping-cough, continuing till relieved by vomiting of sour or bilious matters; tightness of chest; desire to take a deep breath; soreness and burning in chest, with stitches in the right lung.

Digestive System.—Derangement of taste; desire for fat ham; beer tastes bitter, and causes vomiting and burning in stomach, mouth, and throat, relieved by eating; much flatulence; constipation with violent pain and pressure in the stomach after eating the simplest food; stools hard, dark, and in balls.

Genito-Urinary System.—Urine, increase of, which is pale and clear, or with red deposit; swelling of sexual organs; menses too frequent and lasting too long, or delayed or suppressed; Leucorrhœa, which is like white-of-egg, and corrosive.

Bones, Teeth, etc.—Inflammation and swelling of the long bones, especially the tibiæ, with great sensitiveness to touch; pains are worse at night and when cold, better by wrapping up, worse on approach of wet or stormy weather; pains are of an aching or bruised character; in Prosopalgia and dental caries, pains are worse by pressure, as when biting anything; teeth feel elongated.

Skin.—Itching over the whole body, worse on undressing at night and when warm in bed; itching worse by scratching, and changed by that to burning; blotches break out over the whole body; eruption pale-red, secreting a thin fluid forming into scabs or crusts, or honey-like crusts; ulcers covered with thick yellow crusts, under which pus is secreted; fiery redness round the ulcers, with throbbing burning pain at night; itching vesicles round the ulcers; ulcers readily bleeding when touched; the eruptions and ulcers occur most frequently on

the scalp, face, and legs; the hair falls off the scalp and eyebrows. In the nostrils, and about the nose and lips, scabs form with honeycomb appearance, burning when scratched.

ANALOGUES.—*K.-Bich.*, *K.-Hydriod.*, *Merc.*

80.—Millefolium—*Achillea Millefolia, Yarrow.*

A common perennial, indigenous throughout Europe and Russian Asia. The whole plant is employed in the preparation of tincture.

LEADING USES.—Hæmorrhages from various organs, especially from the nose, lungs, and stomach, and from hæmorrhoidal veins.

HEAD.—Congestion; sensation of fulness, and as if blood rushed to the head, with confusion and ringing in the ears, relieved by *bleeding from the nose. Epistaxis.*

RESPIRATORY SYSTEM.—Oppression of the chest, with bloody expectoration; Cough, with frothy expectoration of bright-red blood.

DIGESTIVE SYSTEM.—*Hæmatemesis.*—Ulcers on gums and in throat, with elongation of uvula; burning in the stomach extending to the chest; painful gnawing and digging in the stomach, as if from hunger; frequent emissions of fœtid flatulence; cutting and rumbling pain in the abdomen, followed by Diarrhœa and Tenesmus; Dysentery; *Bleeding Piles.*

GENITO-URINARY SYSTEM.—*Hæmaturia*, with frequent desire to micturate; emission of blood very profuse, with pain in the kidneys; menses too profuse.

ANALOGUES.—*Ham.*, *Ipec.*

81.—Nux Vomica—*Strychnos Nux Vomica—Poison-nut.*

The tree is of considerable size, indigenous to the Indian Archipelago, Southern India, Ceylon, etc. We use the seeds (*nuces vomicæ*), from which, pulverised, we prepare an intensely bitter tincture or trituration, which, like other bitters, excites an increased secretion of saliva.

Leading Uses.—Spasmodic affections of the nervous system; *Dyspepsia with Constipation;* Intermittent fever, with predominance of dyspeptic symptoms, crampy pains, etc. It is preeminently suited to all affections of the nervous and digestive systems due to depression consequent on over-stimulation, as in immoderate straining of the nervous system by the haste and worry of business, excessive study, anxiety, etc., or by the use of *alcoholic drinks, tobacco, coffee,* and other stimulants. Hence its adaptation to the ailments of the hurried, the sedentary, the studious, and the intemperate.

Special Characteristics.—Persons of spare habit, firm fibre, energetic and irritable disposition, dark complexion, who suffer from Constipation, or uneven action of the bowels, and wake up early in the morning with headache, and crowding of ideas, falling again into a heavy, unrefreshing sleep, are generally most benefited by *Nux V.* The symptoms generally occur, or are worse, very early in the morning—two or three o'clock—and are aggravated by food and mental exertion.

Nervous System.—*Tetanus,* without loss of consciousness; tetanic spasms alternating with relaxation and Asphyxia; *Spasm,* pain, and weariness, with sensation in the joints as if bruised; trembling of the limbs as in drunkards; Epilepsy, the attacks being preceded by dizziness, and *creeping itching sensations in the face,* as from insects, which are followed by violent jerks of the arms, ending in loss of consciousness; convulsive movements excited by touch; *morbid acuteness of the senses;* Paralysis of drunkards; early stage of *Delirium Tremens;* tendency to Apoplexy; neuralgic affections of the spinal marrow, with tingling, hard aching, sticking pains aggravated by motion or contact, restless sleep, with frightful dreams, Nightmare, mental depression, Hypochondriasis and other nervous diseases, associated with Indigestion, or Inebriation. In sleeplessness of hypochondriac irritable patients, troubled with Vertigo, and easily fatigued with mental exercise, *Nux V.* quiets the nervous system and produces sleep.

Head.—Congestive headache, worse after eating, with throbbing, giddiness, flushed face, *aching as if the head would split,* and stupefaction, often with nausea, vomiting, or Con-

stipation, and increased by coughing or stooping, and especially in strong, plethoric persons; hysteric Hemicrania; Headache following intoxication; severe Headache beginning with dazzling of the sight; luminous vibrations seen a little distance from the eyes.

Respiratory System.—"Stuffy" cold in the head; dry, racking, spasmodic Cough, causing soreness in the pit of the stomach, and aching of the head as if it would split; Cough associated with gastric or liver derangement; chronic Bronchitis of old persons, with profuse and difficult expectoration; *Spasmodic Asthma*, the muscles of the chest being rigid during the attack, the patient oppressed with anxiety, and complaining of a soreness or aching under the breast-bone, the paroxysm ending in copious vomiting of phlegm; shocks and palpitation of the heart during Asthma; Spasm of the heart.

Digestive System.—Toothache, associated with Indigestion or pregnancy; spasmodic Hiccough and difficulty of swallowing; *Dyspepsia*, the fore half of the tongue being comparatively clean and the back part coated with a deep fur; sour, foul, or bitter taste in the mouth; *Flatulence;* Heartburn; rising of a sour and bitter fluid; *Water-brash* (see also *Lyc.* and *Bry.*); eructation of food soon after it is swallowed, without retching or straining, the food tasting much as it did when swallowed; *Cardialgia;* oppression of the stomach after eating, with depression of the spirits, ill-humour; sense of weight or pressure in the stomach, with soreness and sensitiveness; *Acute Indigestion* from indigestible food, or after intoxication, with pain, retching, and vomiting; Chronic Indigestion, with crampy pains, or *spasms of the stomach or bowels, flatulence,* and Constipation; gnawing and sinking at the stomach; pain after the least food; aching pain in the epigastrium and hypochondrium; spasmodic Vomiting and retching; morning Sickness of pregnancy; spasmodic and flatulent *Colic* (see also *Coloc.* and *Iris*); *Constipation*, the action of the bowels being "inharmonious and spasmodic," the patient having frequent ineffectual urging; spasmodic dysenteric attacks; Hernia of women and children; Diarrhœa of infants when artificial food disagrees with them; *Blind Piles* (in alternation with *Sulph.*), with congestive Headache;

Prolapsus, or Stricture, of the anus, with Constipation; chronic liver-complaint, especially in old persons.

Urinary System.—Spasms during the passage of urinary calculi; Strangury, from chronic irritation of the lower portion of the spine; Incontinence of Urine from Paralysis of the sphincters.

Generative System.—Irritability of the male sexual organs, with emissions; spasmodic pains in the spermatic cord, with retraction of the testes. Spasmodic menstrual colic, with premature, scanty discharge, cerebral congestion, and chilliness, Dyspepsia, and other conditions as above; continual dribbling of the menses; *Prolapsus of the uterus and vagina; Metritis;* Leucorrhœa; *Morning-sickness.*

Strychnia.—*Strychnine*—the alkaloid of *Strychnos Nux V.*—is largely used by Allopaths, but little by Homœopaths, since it has not so wide and varied a curative range as *Nux V.*, its influence being, it is believed, limited to the spinal cord, and not reaching the brain. Our use of it is almost strictly confined to the paralytic and the more violent *spasmodic* and *tetanic* (traumatic) affections caused by the drug.

Phosphate of Strychnine is valuable in rheumatic affections of the aged, with stiff and weak muscles and a tendency to painful Cramps.

Analogues.—*Ign., Podoph., Bry.*

82.—Opium—*Papaver Somniferum—White Poppy.*

This plant, and preparations from it, have been used for medical purposes from the remotest antiquity. The *Opium* we use is the inspissated juice, and is obtained from Turkey and Egypt.

Leading Uses. — Heaviness with Headache, and great sleepiness after meals in apoplectic patients; Chronic Constipation; torpidity; stupor.

Nervous System.—*Apoplexy,* with slow, full pulse, snoring-breathing; certain cases of *Delirium tremens; Convulsions* of children from *fright;* acute Fevers characterised by a sopor bordering upon stupor, and by absence of any complaint;

snoring with the mouth open, half-jerking of the limbs, and burning heat of the perspiring body; Typhus, with partial suppression of urine, and sleepiness; unconquerable *drowsiness*, followed by *Sleeplessness*, Headache, listlessness, chilliness, etc.; stupefying, unrefreshing sleep, with snoring, half-open eyes, stertorous, irregular breathing; *Coma*, with great difficulty in arousing the patient (when slight, *Bell.* is useful). *Headache*, with heaviness, throbbing of the arteries, redness of the face, sleepiness after meals, with contraction of the pupils, especially in persons predisposed to Apoplexy, or who drink alcoholic liquors largely.

Digestive System.—Nausea, anorexia, constipation. Dyspepsia of drunkards whose digestive organs seem to have lost all tone; obstinate *Constipation*, from utter torpidity and inaction of the intestines, and when little or no inconvenience is felt from the want of action; *Lead-colic* and Constipation; Incarcerated Hernia.

Urinary System.—Paralytic retention of urine, especially in young children and old persons.

Skin.—Sudden retrocession of acute eruptions, inducing brain-symptoms characteristic of the drug.

Special Characteristics.—Torpidity or inactivity stamps the whole system, both mental and physical; medicines indicated seem to be inert till *Opi.* has aroused the dormant energies and so rendered the nervous system susceptible.

Analogues.—*Cann.-Ind.*, *Gels.*

83.—Petroleum—*Mineral Naphtha—Rock Oil.*

As several liquid hydro-carbons are sold under this name, it should be observed that the proving refers to the product of Rangoon Petroleum agitated with Sulphuric Acid and then rectified. The product which remains unaffected by the Acid is prepared as a trituration.

Leading Uses.—Diseases of the *Gastro-Intestinal Canal*, especially nausea and vomiting arising from reflex irritation; Cardialgia; Dysentery. Diseases of the *Skin*, as Urticaria, Prurigo, Herpes of the Scrotum and Perineum, Fissures in

the hands and anus, Psoriasis palmaris, Tinea Capitis, Fistula Lachrymalis, Chilblains, Burns. Rheumatism of the Joints.

Head, Eyes, etc.—Chronic Vertigo and headache, especially the back part of the head, worse by least touch, mental exertion, stooping, or rising; scrofulous and gonorrhœal Ophthalmia (comp. *Puls.*); itching of the eyelids; Fistula of tear duct; deafness, with ringing, itching, and cracking in the ears, and diminished secretion of wax; ulceration of the inner and upper part of the nose, with dryness, or secretion of pus.

Circulatory System.—Pulse full, quick, and increased by any exertion; chill, often with heat in the evening; chills, with headache and cold hands and feet; sensation as of a *cold stone at the heart;* Palpitation of the Heart, with pressure and fainting.

Digestive System.—Dryness of mouth and throat, with hawking up of thick mucus in the morning; sensation as of a fish-bone in throat when swallowing; rawness in throat extending to the stomach; canine hunger; dislike to meat or cooked food; desire for beer; intense thirst; putrid flat taste in mouth; sour risings; vertigo after eating; nausea when riding in a carriage or boat; *Sea-sickness;* vomiting of bile; *Vomiting during Pregnancy;* sensation of fulness in stomach with soreness to touch; sensation of coldness in abdomen, with rumbling of flatulence at night; stools hard, difficult, lumpy, and scanty, or loose, slimy, with bloody mucus; fissures of anus.

Genito-Urinary System.—Frequent, scanty, difficult urination, with burning in urethra; involuntary nocturnal Enuresis; itching, moist eruptions about the scrotum, perineum, and thighs; menses too early, with acrid discharge; Prolapsus of Uterus by day from debility; itching and scurvy covering on the nipples.

Extremities.—Brown or yellow spots on arms; burning in palms of hands; chapped hands and fingers, easily bleeding; rheumatic pains in the joints, especially in the knees, with cracking noise and stiffness on movement; hot swellings of feet, soles, and toes.

Skin.—Swelling and induration of the glands; fœtid sweat in the axillæ, or of the feet; unhealthy skin, even small wounds ulcerate and spread; roughness, cracking, and redness of the skin, which itches violently on scratching, most on hands, scrotum, and anus, and discharges thin watery fluid; skin rises in wheals when scratched; Prurigo; Acne; Ulcers with proud flesh; *Chaps and Chilblains*. For burns, and for exuberant growths afterwards, an application of equal parts of *Petrol.* and Olive-oil has been found useful. For fissures of the anus and hands, Petroleum Soap is often beneficial, as well as for itching of the skin generally.

Analogue.—*Kreas.*

84.—Phosphorus—*Phosphorus.*

The effects of *Phosphorus* on persons employed in lucifer-match manufactories are very injurious; it often causes Necrosis of the lower jaw; Gum-boils; falling out of the teeth; melting away of the gums, so that the diseased jaw is seen. When the inflammation extends, the result is not unfrequently fatal.

Leading Uses.—*Organic disease* of the *liver; Inflammation of the lungs; Jaundice* in Yellow- and other fevers, with black vomit; Fatty degeneration of the heart, liver, muscles, etc.; adynamic fevers, with prostration, Hiccough, cold extremities, clammy sweats in the face, and emaciation; typhoid conditions in various diseases, with parched and cracked, or blackish glazed tongue; consequences of sexual excesses; Marasmus; disease of bone; Hectic fever.

Special Characteristics.—A pale, sickly, sallow, or bloated appearance of the face, prostration of the nervous system, pains in the joints, tendency to lung-disease, quiet lowness of spirits, and gradual wasting. Great tendency to bleeding from every part of the body.

Nervous System.—Functional Paralysis, and Epilepsy, from debilitating causes—sexual excesses, want, etc.; progressive Spinal Paralysis, the brain being undisturbed; Degeneration and liquefaction of brain and spinal cord, producing complete Paralysis of motion and sensation; Hemi-

plegia in scrofulous old persons, with creepings in the paralysed parts, thick urine. *Progressive Locomotor Ataxy.* Weakness of children who are late in walking; Marasmus, trembling, general debility, and depression of spirits. *Sleeplessness* before midnight: contrary to *Ac.-Phos.* after midnight.

Head, Eyes, Ears, etc.—Arthritic Hemicrania, with swelling, inflammation, and intense painfulness of the affected part; *Headache* with weakness, worse on alternate days, and relieved in the open air, with coldness in the occiput; chronic Conjunctivitis; Amaurosis, with lancinating pains through the eyeballs, and deep-seated pains in the orbits; burning in eyes with flow of tears; Deafness in debilitated subjects, especially to the human voice, while the patient's own voice reverberates; in strumous females and children, with humming, whizzing, dryness, and occasional oozing of greenish mucus; Chronic Catarrh, with inflammation of the nose, and fœtid discharge of greenish mucus.

Respiratory System.—Cough with general irritation in the chest; hacking, wasting cough, expectoration of rusty-coloured or greenish, and sometimes fœtid, sputa, the lungs feeling crowded and tight; Cough and chest-troubles, with similar symptoms, occurring in, or following Enteric, Typhus, and other fevers; sense of heat or sharp pain during inspiration; chronic Cough, with tough reddish-brown expectoration; chronic Bronchitis, with much constitutional disturbance, soreness of the air-passages, frothy and bloody or purulent expectoration, emaciation, hectic, etc.; *simple, typhoid, and chronic Pneumonia*, the cough causing soreness, expectoration of mucus and blood; Broncho-Pneumonia (alternately with *Ant.-T.*); Pleuro-Pneumonia (alternately with *Bry.*); Phthisis Pulmonalis, in the early stage, also during the course of the disease; it relieves congestion, quiets the Cough, moderates Diarrhœa, etc.

Digestive System.—*Decay of teeth* in the lower jaw, especially when extending to, or arising from, the jaw itself, with inflammation of the gums, *tendency to Gum-boils;* bleeding of the gums; irregularities of teething in the lower jaw, especially in scrofulous children with chronic Diarrhœa, tendency to Mesenteric disease; Cardialgia, with frequent vomiting, sense

of heat in the stomach; the cardiac orifice seems to the patient too narrow; Diarrhœa, with straining; hunger, with emaciation, white-coated tongue, etc.; impaired digestion from sexual excesses, with great weakness; Gastro-enteritis, and disease of the stomach, ulceration, etc., involving emaciation of the patient; chronic Diarrhœa, watery or colliquative, in nervous patients and children: mild Diarrhœa of Phthisis; diseases of the liver in which the functions of the organ are suspended; acute Atrophy of the liver, Cirrhosis, obstructive Jaundice, etc.; malignant Jaundice, burning distress in the stomach, black vomit; acute Fatty degeneration of the liver; chronic Jaundice.

Urinary System. — Thick, turbid, and scanty urine in typhoid conditions; high-coloured and frothy urine; fatty pellicles floating on the urine; Albuminuria; Nephritis.

Generative System.—Emissions, weakening the patient; erections with too speedy emissions; Spermatorrhœa; Impotence; Satyriasis. Amenorrhœa or scanty menses with pale, sallow, waxy-looking complexion, and strumous constitution; chronic Inflammation of the breasts, with fistulous openings.

Osseous System.—Periostitis of the jaws and facial bones when the periosteum has been injured; necrosis of the jaw; caries of the teeth; interstitial disease of the vertebræ and of the cancellous structure of bones generally.

Skin.—Diseases of the skin in the neighbourhood of the lower jaw; *fistulous Ulcers* with fever; fungous hæmatodes; Chilblains, from which a fœtid watery secretion exudes, in scrofulous females.

Analogue.—*Ac.-Phos.*

85.—Phytolacca Decandra—*Poke-weed.*

The roots, leaves, and berries are the parts used in medicine.

Leading Uses.—*Diphtheria*, and other affections of the throat; Abscess, Fistula, and irritability of the *mammary gland; chronic Rheumatism.*

Head, Nose, etc.—Dull, heavy headache in the forehead,

vertex, and occiput, with yawning; syphilitic headache; acute Coryza; Ozæna, and syphilitic ulceration of the nose.

Respiratory System.—*Hoarseness* and *Aphonia* with great dryness, and sense as of a lump in the throat; Cough, day and night, with feeling as of an ulcerated spot in the windpipe, above the breast-bone; incipient catarrhal affections of the throat. *Diphtheria*, and *diphtheritic inflammation* of the throat, commencing with roughness or rawness of the throat, choking sensation from swelling of the soft palate and tonsils, and fiery redness of the velum palati. In cold weather, when diphtheritic inflammations are liable to prevail, *Phyto.* (3x) may be recommended in almost every case of incipient dryness or soreness of the throat that may result in Diphtheria; or it may be administered by inhalation, or as a wash or gargle—twenty-five drops of the tincture to a quarter of a pint of water.

Digestive System.—Mercurial ptyalism and pains in the teeth; Toothache, with inflammation of the gums and mouth; difficult dentition; darkish-red inflammation of the fauces, swelling of the tonsils, with superficial Ulcers, and thick white mucus; Scarlatina Anginosa, with glandular enlargements, ulcerated throat, hoarseness, etc. Vomiting, coming on very slowly, preceded by nausea, prostration, yawning, etc.; soreness and pain in the hypochondrium during pregnancy; Constipation in the aged, or in feeble persons, with weak, intermittent heart's-action, and relaxed muscular frame; ulceration of the rectum; Fissure and Prolapsus of the Anus, etc.

Urinary System.—Urine diminished, afterwards increased, and becoming albuminous; Albuminuria, as in Scarlet Fever, Diphtheria, etc. Pyelitis.

Generative System.—Loss of sexual desire, relaxation of the genitals, and Impotence; obstinate Gonorrhœa and Gleet; secondary and tertiary Syphilis; nightly pains in the tibia, with Nodes. Metrorrhagia; excoriated or cracked nipples; inflammation, *swelling*, *hardness*, or morbid sensitiveness of the breasts; *Mammary abcess and fistulous openings of the breast;* morbid sensitiveness and tenderness of the breasts during menstruation or suckling. In Mammary Abscess,

cracked nipples, etc., it should be used as a *lotion*, or *cerate*, as well as administered internally.

Skin, etc. (Internal and external use.)—*Boils; chronic Ulcers* and eruptions; Tinea Capitis; Lupus, Scabies, Whitlow, Felon, and chronic syphilitic cutaneous diseases. *Fatty Tumours*, used as an external application mixed with Glycerine.

Rheumatic Affections.—*Chronic Rheumatism*, with heavy aching and coldness in the affected limb, the pain being worse in warmth and in damp weather, with co-existing glandular enlargements; rheumatic irritation of the sheaths of the nerves, or of the fibrous tissues of the bones; joints swollen, tender, red, and shining, with extreme pain on movement, worse at night; Rheumatism of the hip-joint; Stiff-neck; Lumbago; and rheumatic and neuralgic affections of the lower extremities.

Analogues.—*K.-Hyd.*, *Merc.*, *Mez.*

86.—Platina—*Platinum.*

After being purified, we make triturations of this substance.

Leading Uses.—*Nervous affections*, with depression, apprehensiveness, and uterine derangement. In ovarian disease, it holds a place similar to that of *Aurum* in affections of the testicle.

Nervous System.—Depression of spirits and melancholy even to the fear of death, with anguish about the heart; Neuralgia with numbness; Hysteria; sleeplessness from nervous excitement; religious melancholy; sensation as of something alive in the abdomen, with Metrorrhagia. It is especially suited to dark-complexioned females, of spare habit, liable to neuralgic headaches; *Headaches* which increase gradually to a pitch of intensity and as gradually decline. *Digestive System.*—Flatulence and Constipation. *Generative System.*—Profuse or premature menstruation, or watery Leucorrhœa; chronic congestion of the ovaries; induration and prolapsus of the womb; Condylomata.

Analogues.—*Aur.*, *Plumb.*

87.—Plumbum—*Lead.*

We use trituration of the metal itself—*P. Metallicum;* the Carbonate—*P. Carbonicum;* or the Acetate—*P. Aceticum;* their actions being similar.

Leading Uses.—*Chronic dull Headache*, with depressed spirits, weeping mood, tendency to Paralysis, and Constipation; blue margins on the gums, with sponginess and shrinking, as in some cases of *Phthisis;* wasting of the body, trembling, similar to that caused by lead-poisoning, with Palsy, Epilepsy, or Neuralgia; melancholy; *obstinate Constipation*, the fæces being dry, shaped like balls, and when there is spasmodic constriction of the sphincter ani, especially in aged persons; *Colic*, relieved by pressure on the abdomen, with Constipation, like Lead-colic. Granular degeneration of the kidney. The last-mentioned disease exists in something like one-half of those who work in lead; we should expect, therefore, to find *Plumb.* valuable in Nephritis, when not due to this cause.

Lead-colic or *Painter's-colic* is best treated by *Opi.*, *Alum.*, or *Plat.*, according to the symptoms.

Analogues.—*Alum.*, *Opi.*, *Plat.*, *Zinc.*

88.—Podophyllum Peltatum—*May-Apple—Mandrake.*

This plant, of the genus *Mandragora*, has been supposed to be the same as that of which we read in the Scriptures as the mandrake. The tuberous root is the officinal portion.

Leading Uses.—Irritation of the mucous tissues, and their associated glands, especially those of the digestive tract; it is therefore homœopathic to Enteritis, Gastritis, and occasionally to Bronchitis and Urethritis.

Circulatory System.—Slow, or scarcely perceptible, pulse; chilliness, followed by fever and disturbed sleep; depressed state of the heart and arteries, and low tone of the vital energies of the whole system.

Fevers.—Bilious Fever, Typhus and Enteric Fever, especially when Peyer's glands are inflamed. The drowsiness

by day and the restlessness by night which attend "bilious attacks," and often precede various fevers. Febrile symptoms which tend to recur in the *morning*, and are therefore remittent in their character.

Digestive System.—Salivation; nursing sore mouth; Canker in the mouth, etc. Biliousness, with nausea, giddiness, bitter taste and eructations, vomiting and purging, and dark urine. Acute irritation, congestion, and inflammation of the liver, bilious diarrhœa, and hepatic pains. Dr. Hale considers that the dose in hepatic disorders is of great importance, and lays down the following rules:—"(1) For the primary (acute) conditions, similar to those caused by large doses of *Podoph.*, the highest and middle attenuations. (2.) For symptoms and conditions (chronic) simulating the secondary effects, the lower attenuations. (3) In a few cases, as in retention of the bile from obstruction of the gall-duct, or in cases of gall-stones, we must have direct mechanical effects of *Podoph.* In such cases, crude doses are required." Diarrhœa accompanied by complete Jaundice, or *alternating* with Constipation; stools, though natural, too frequent; *Diarrhœa*, which occurs most in the morning, with tenesmus; stools chalky or yellow colour and very fœtid, especially in infants during dentition, with cerebral symptoms; obstinate Constipation, which often follows an attack of Diarrhœa in hand-fed infants, when the motions are very hard, crumble when broken, and of a clay colour, often mottled with green; Colitis, Dysentery, especially with *Prolapsus Ani*, Cholera, Piles, and other inflammatory diseases of the intestinal tract. The drug has acquired a well-established repute among allopaths as a purgative. Indeed, from the character of the motions produced by it, has been called "vegetable mercury."

Genito-Urinary System.—Primarily, it cures involuntary urination; secondarily, suppression and scantiness of urine. *Prolapsus Uteri*, associated with the rectal symptoms for which the drug is homœopathic. *Irritability* of the *Ovaries*.

Analogues.—*Merc.*, *Aloes*.

89.—Pulsatilla Nigricans—*Wind-flower—Meadow Anemone.*

A perennial flower, indigenous to elevated places in the greater part of Europe, where the soil is dry and sandy, and the situation exposed, hence called "wind-flower." A tincture is prepared from the whole plant.

Leading Uses.—Affections of the mucous membrane of the digestive canal, the synovial membranes, the veins, the sexual organs, the eyes and ears.

Special Characteristics.—*Puls.* is especially suited to females, and persons of a gentle, good-naturedly mischievous disposition, easily excited to laughter or weeping, having pale face, blue eyes, blond hair, freckles, and a tendency to Leucorrhœa or other kinds of Blenorrhœa, with an inclination to a deposit of fat under the skin, and a tendency to shed tears when the patient is describing her sufferings. Absence of thirst; frequent chilliness; pains worse with warmth, and during rest, but abating in the open air, or during moderate exercise. Mental affections accompanied by envy, religious mania, or melancholy.

Rheumatism.—Here it is only indicated when the symptoms are sub-acute, with swelling of the affected (chiefly the small) joints, and but little inflammatory redness, and when the pains wander from one part to another, with the characteristic Dyspepsia, chilliness, absence of thirst, diarrhœa; Rheumatic-Gout in females, with periodic irregularities.

Measles, etc.—In *Measles*, *Chicken-pox*, *Remittent fever* (also *Gels.*), and other diseases of children, it helps to clean the tongue, moderates Catarrh, and checks Diarrhœa. In uncomplicated *Measles* it is almost a specific, and is especially valuable after the fever has been modified by *Acon.* *Puls.* is also preventive of Measles, and of its sequelæ.

Head.—Gastric headache, from rich, fatty, indigestible food, severe pain on one side behind the ear, as if a nail were driven in; headache, on the left side; nervous or sick headaches (also *Iris*), particularly in hysteric females, or connected with the menses; Hysteria, or dejection of spirits, from milk- or menstrual suppuration. Facial neuralgia from getting the feet wet or from abuse of Quinine.

Eyes, Ears, etc.—Styes; subacute inflammation of the lining membrane of the eyelids, with profuse lachrymation, agglutination, etc., in persons of the temperament described; Ophthalmia following Measles; twitching of the eyelids, with dazzling of the sight; weak eyes from local rather than from constitutional disorders. Earache of children, with passive purulent discharge; noises in the ear or recent Deafness, following Catarrh or Measles. Toothache accompanied by earache and headache, chiefly confined to one side, the toothache ceasing in the open air, but returning in a warm close room. Lost or perverted smell.

Circulatory System.—Varicose veins of the legs (also *Ham.*), and embarrassed venous circulation in the hands, and generally in females, especially when caused by pressure from pregnancy; Phlebitis in the leg (internal and external use).

Respiratory System.—Catarrhal affections of the air-passages, with loss of taste, thirst, or smell; excessive expectoration of mucus in old cases of Bronchitis; mild Hæmoptysis in Bronchitis, marked by expectoration of mucus having a fœtid taste and smell; bronchial relaxation after Whooping-cough or Measles.

Digestive System.—Viscid, *whitish* mucus, thickly covering the tongue; bitter, sour, or foul taste; diminished or altered taste, with the *Puls.* characteristics. Dyspepsia, Colic, or Diarrhœa from the use of pork, pastry, or other fat, rich diet; eructations tasting of food; vomiting of mucus or bile; Heartburn; a feeling of distention after a meal, necessitating the loosening of the dress; passive venous congestion of the abdomen. Mucous Diarrhœa with sensitiveness of the abdomen especially from rich, indigestible food, or occurring at night.

Genito-Urinary System.—*Chronic Catarrh* of the bladder; difficulty of passing water during pregnancy. *Orchitis;* Prostatitis (also *Thuja*); Hydrocele; etc. Pains in the left side (also *Cimic.*) in females between the hip and the lower margin of the ribs or a little above, associated with some derangement of the monthly period; passive congestion of the uterus; uterine irregularities—delayed, suppressed, pale or watery menses; passive, painless, milky Leucorrhœa, with

backache; false, delayed, or deficient labour-pains (also *Sec.*); retained *placenta*; excessive after-pains; suppression of the lochia; painful tension of the breasts, and a deficient secretion of milk. Administered some time previously, it facilitates labour.

Skin.—Itching or burning of the skin, with nervous or menstrual disorders; eruption resembling that of Measles; varicose, readily-bleeding Ulcers.

Analogues.—*Ant.-C.*, *Ham.*, *Sabi.*

90.—Ranunculus Bulbosus—*Bulbous Crowfoot.*

A tincture is prepared from the whole plant, gathered at the flowering time. The habitat is in meadows throughout the greater part of Europe.

Leading Uses.—*Pleurodynia*; inflammation, burning itching, and vesication of the skin.

Nervous System.—Spinal Irritation and Neuralgic (rheumatic) Pleurisy, Pleurodynia, Pleurisy with effusion of fluid, Hydrothorax, Sciatica, intercostal Neuralgia, followed by eruption of shingles. The neuralgic pains are mostly situated in the spine and nerves, proceeding thence to the walls of the chest, occur on the left side, are often limited to the inner edge and lower angle of left bladebone, and go through the chest; partake of the character of stitches, worse by movement, inspiration, and touch, and are particularly worse in the morning.

Skin.—Vesicular eruptions, containing clear water, vesicles often of large size; herpetic eruption on hands and fingers; Pemphigus in infants; Chilblains.

Analogue.—*Rhus.*

91.—Rhus Toxicodendron—*Poison-oak—Sumach.*

This shrub is indigenous to North America; it abounds on the borders of rivers, or in marshy districts, growing very tall in a congenial soil. We make a tincture from the leaves,

which should be gathered at night, and not subsequently exposed to the sun. The tincture deteriorates by long keeping.

Leading Uses.—*Rheumatic* complaints, *skin* affections, and strains of the *joints*, or of the membranes investing the joints.

Rheumatism.—Sub-acute and *Chronic Rheumatism* and *Lumbago*, *rheumatic Sciatica*, and *rheumatic stiffness* and *lameness*, chiefly from getting wet, or taking cold when the body is in a state of perspiration or excitement. It acts chiefly on the tendons, fasciæ, sheaths of nerves, etc. The indications for the use of *Rhus* in rheumatic diseases, as also in *Strains*, are :—*Increase of pain during rest* (contrary to *Bry.*), at night when warm in bed, on first moving the parts, and on waking up in the morning; the pains are relieved by continued gentle movement, flexion of the limbs, and dry heat. Indeed, these indications are valid in some other conditions, not rheumatic; and some physicians give *Rhus* in any affection in which these symptoms are present. The right side of the body is chiefly affected by *Rhus*.

Paralytic Affections.—*Paralysis* of a *rheumatic* character, with sprain-like pains in the joints and occasional sensations of numbness; Paralysis of the lower limbs (*Paraplegia*) in young persons and children, from cold—sitting on cold stones, standing in the wet, etc.—with great pain in the paralysed parts; Paralysis of the feet, as from a fall on the back.

Fevers.—When rheumatic symptoms develop themselves during Scarlet, Enteric, or other fevers, *Rhus* is a prime remedy; also when the fever-patient is continually moving himself for change of posture as a means of relieving the aching of his back and limbs.

Head, Eyes, etc.—Rheumatic or arthritic Hemicrania, the brain seeming to shake in the skull, with burning pains, and swelling of the head and face. *Scrofulous Ophthalmia*, with burning pains in the eyes, lachrymation, intolerance of light, swelling and inflammation of the lids. *Vesicular Erysipelas* of the nose and face.

Respiratory System.—Cough, as in the bronchial Cough of old persons, coming on when first waking or on first moving about, accompanied by the expectoration of small

plugs of tough mucus, relieved by warm drinks, aggravated by cold.

Digestive System.—Dyspepsia, with flow of water, dryness of the mouth, capricious or lost appetite, pressure in the stomach, and sense as if it were swollen; Diarrhœa of a typhoid character, or Diarrhœa ushering in or accompanying the early stage of fever, the evacuations being mixed with jelly-like mucus, blood, etc. *Dysentery*, alone, or in alternation with *Merc.-Cor.*

Skin.—*Vesicular Erysipelas*, and Erythema, with much burning and itching: for these affections *Rhus* is one of the *best* remedies; *Shingles* (Herpes Zoster); Eczema, especially of the palms of the hands; Erythema Nodosum; Tinea Capitis, with fœtid yellow matter under the scabs; superficial Burns. In susceptible persons contact with the shrub produces an erythematous and vesicular eruption, with itching and burning, going on to more severe results.

External Use.—*Rhus* is an efficacious remedy as an external application for sprains, injuries to ligaments, tendons, etc., especially when the indications above pointed out are present. The injuries generally arise from mis-steps, twists, efforts made in an unusual posture, etc. It bears the same relation to a strain that *Arn.* does to a bruise. Extensive *superficial Burns*, the *Stings* of insects, old Chilblains, and sometimes Warts, are relieved or cured by the use of *Rhus*, given internally and applied externally. In skin diseases, intolerable burning and itching are special indications for its use.

Formula.—Thirty drops of the strong tincture to about half a pint of water.

Analogues.—*Ran.-Bulb.*, *Bry.*, *Arn.*

92.—Robinia Pseudo—*Acacia—False Locust.*

Tincture is prepared from the bark of the plant.

Leading Uses.—Sick headache, with *acidity* of the stomach; Indigestion, with heartburn and *acidity*, especially when occurring most at night; Vomiting of very sour fluid setting the

teeth on edge; great distention of stomach and abdomen, with flatulence and severe colic, desire for stool, but only flatulence passes off, followed by constipated stool; sour vomiting and sour stools of infants.

ANALOGUE.—*Puls.*

93.—Ruta Graveolens—*Garden-rue.*

The whole of this common under-shrub is employed in the preparation of tincture.

LEADING USES.—Rheumatism, and Strains of the wrist and ankle; bruised pains in the bones, joints, and cartilages, worse during rest; laming pain in the *tendo-Achillis*; *Ganglion;* Bunion, bites from dogs, etc. *Eyes.*—Weakness of sight from over-exertion of the eyes, as in reading or sewing. *Digestive System.*—Aching, gnawing Gastralgia; Worms of children, with vomiting and Colic. *Generative Organs.*—Menorrhagia, with hysteric Spasms and head-symptoms. *Coccyodynia* in women from injury during labour, or otherwise.

EXTERNAL USE.—As a lotion to *bruises* instead of *Arn.*, when that remedy produces Erysipelas, and when the Contusion is more of *bone* than of soft parts. It also assists in the union of fractures when that process goes on tardily.

Formula.—Twenty drops of the strong tincture to half a teacupful of water.

ANALOGUES.—*Rhus, Sabi.*

94.—Sabina—*Savin.*

We prepare a tincture, using rectified spirit, from the fresh leaves and points of shoots of cultivated plants.

LEADING USES.—*Ovario-uterine irritation.* In *Menorrhagia* we prescribe this drug with great confidence, when the discharge is bright-red; profuse Hæmorrhage after parturition or miscarriage. In these cases, the occurrence of bladder or rectal irritation is an additional indication for *Sabina.* Even in threatened miscarriage, in the third or fourth month, with

heat and soreness, this remedy is often successful. *Leucorrhœa* when it is vicarious of menstruation ; *Dysuria.*

Sabi. is sometimes prescribed for recent rheumatic or neuralgic pains, and Rheumatic Gout, associated with uterine derangements.

Sabina and Crocus.—The hæmorrhages curable by these remedies differ in their colour and consistence ; those of the former are bright-red and fluid, but those of the latter are dark and clotted.

Analogues.—*Croc.*, *Ruta.*

95.—Sanguinaria Canadensis—*Blood Root.*

The plant grows from Canada to Florida. A tincture is prepared from the rhizoma, or a trituration from Sanguinarin.

Leading Uses.—Diseases of the *Respiratory Organs*, as Pneumonia, Pleurisy, Asthma, Croup, Pharyngitis, and Laryngitis. Diseases of the Bowels, as Dysentery, Hæmorrhoids, Jaundice. Neuralgia of Head and Face ; Periodical Sick Headaches, Ulcers, Nasal Polypi, uterine disorders.

Head and Face.—Vertigo, with singing in the ears ; congestion of veins of neck ; headache, with soreness to the touch ; periodical sick headaches, beginning in the morning, worse during the day, worse over the right eye, ending with vomiting and sleep. Vertigo during sleep or on lying down at night, or in cold weather, or on quickly turning the head and looking upwards. Neuralgia of the face, beginning in the upper jaw, running up to the head and over the eyes ; shooting, burning pains, as if the forehead would split. Rheumatic and Congestive headaches from suppressed secretions.

Respiratory System.—Great dryness of mucous membrane, as if burned or scalded ; obstruction in nose from Polypoid growths ; ulceration of throat after Quinsy ; inflammation of the Tonsils. Catarrh of Larnyx, Throat, and Bronchia ; sneezing ; severe fluent Coryza ; hoarseness ; dry tickling or rawness in the throat, deep dry cough, followed by expecto-

ration, which becomes rusty or bloody; burning, pressing, sticking pain in chest; oppressed breathing; accelerated pulse; flushed cheeks. Laryngeal Cough (worse when head is low) of a deep hoarse sound, or crowing metallic sound; Croup; pain in the breast, with cough; slowly shooting pain and acute stitches in the right breast; continued pressure and heaviness. Pleurisy—Hæmoptysis during Phthisis pulmonalis. Pneumonia, in second and third stages; chronic Pneumonia; red or grey Hepatisation; infiltration of the parenchyma.

Digestive System.—Inflammation of the stomach, with burning, soreness, and tenderness on pressure, attended with pain after food, vomiting, and headache; loss of appetite; *nausea; vomiting of bitter water*; Dyspepsia, with heartburn; spasmodic eructation. Pains in the Liver from the shoulder, with congestion; biliary calculi. Diarrhœa, with passage of undigested food, or bloody mucus; Bleeding Piles.

Genito-Urinary System.—Frequent micturition at night; abdominal pains at night as if the menses would appear. Menstrual colic, beginning in the back and going through to lower part of the abdomen, and down the thighs; Catamenia too early and profuse; Climacteric symptoms, with *flushes* of heat; Polypoid growths on Uterus and ulcerations; stitches and soreness of breasts.

Skin.—Great dryness; Ulceration; Ulcers with hard edges and bloody discharge; proud flesh in Ulcers; fungous growths; scaly eruptions; ingrowing nails.

Analogue.—*Phos.*

96.—Sarza—*Smilax—Sarsaparilla.*

The long thin pipe-like roots are imported from Central America, the part used by us being the dried root.

Leading Uses.—*Urinary* disorders; *Gravel;* Asthma; cutaneous eruptions; chronic Gout and Rheumatism; Eczema; Herpes of the Prepuce; Crusta Lactea in infants; Urticaria; Rhagades; falling off of the hair.

Genito-Urinary System.—Seminal losses from acridity of

the urine ; Menstruation too late and scanty ; frequent desire to micturate, with scanty emission ; tenesmus and cutting burning pain in Urethra ; much pain when ceasing to pass water, especially in women ; urine pale or high coloured, depositing a mucous or purulent sediment ; *sand* and *gravel*, especially in children, or associated with dyspeptic symptoms, and Rheumatism or Gout. Rheumatic and gouty pains from getting wet, or from suppressed secretions, with scanty and *gravelly urine* ; Gonorrhœal Rheumatism ; Asthma, associated with Gravel and Gout.

Skin.—Skin shrivelled or flabby ; itching of various parts of the body in the evening, and after going to bed ; worse by scratching. Itching with small vesicles or pustules, worse by scratching. Blotches like Nettle-rash, burning and itching violently when rubbed ; dry, scabby, scurfy eruption on the lips, nose, face, ear, and scalp ; eruptions following vaccination ; Eczema ; Boils ; old Ulcers ; sensitiveness of the scalp ; Alopecia ; dry eruption about the Prepuce and Labiæ and inner side of thighs.

Analogues.—*Lyc.*, *Ac.-Phos.*

97.—Secale Cornutum—*Ergot of Rye.*

A tincture is prepared from the freshly-gathered Ergot, collected before the rye is harvested.

Leading Uses.—*Secale* is a *uterine* remedy, especially useful in *Menstrual Colic* and *Dysmenorrhœa*, with labour-like pains in the back, pressure on the bladder, painful swollen veins, etc., preceding the discharge ; *Miscarriage* ; frequent labour-like pains during pregnancy, without discharge ; *Spasmodic* labour-pains, and exhausting, unremitting after-pains. *Prolapsus uteri.* Inflammation of the uterus. Diseases that have a strong tendency to *putrescence.*

Dr. E. M. Hale makes the following statements respecting the action of the drug :—

"1. *Secale has no curative action with which we are yet acquainted, upon the virgin uterus, or upon the uterus undeveloped by normal or abnormal processes. But whenever the*

uterine muscular fibre is normally or abnormally hypertrophied, then may Secale be indicated.

"2. *The primary action of Secale on the healthy uterus is to induce a condition of congestion, and so irritate the muscular tissue and its nervous supply, as to cause that tissue to become abnormally developed.*

The disorders requiring this remedy are "acute and recent irritations of the uterus occurring in previously healthy persons, but of a constitutionally lax and irritable temperament. Hæmorrhage of bright-red blood, generally clotted, flowing intermittently, with heavy, passive and remittent, or spasmodic, expulsive and intermittent, pain. The pulse is hard and quick, there is headache, and fulness in the head. The uterus is always larger than natural, its tissues hypertrophied, but *not* relaxed or flabby."

"3. *The secondary action of Secale is a condition of passive congestion, passive Hæmorrhage, a cachectic or atonic condition, and a paralysis of the motor and sensory nerves of the uterus.* It is indicated when Hæmorrhage occurs in feeble, cachectic women, made so from some dyscrasia of the system. There may be general coldness, while the patient feels warm, and does not wish to be covered. The pulse indicates feverishness; the Hæmorrhage is passive, dark-coloured, and continuous, seldom clotted, sometimes offensive, and the slightest motion aggravates the flow. Cramps in the legs, jerking in the muscles, and melancholic depression."

ANALOGUES.—*Caul., Cimic.*

98.—Senecio Aureus, et Gracilis—*Life Root.*

The difference between these two plants is due to the different soil and conditions of their growth; they are botanically and chemically identical; they grow on moist ground in the north and west of the United States. The whole plant, gathered when in flower, is used in preparing the tincture.

LEADING USES.—*Menstrual irregularities*, giving rise to the term by which it is popularly known in America, "the female regulator." Diseases of the prostate gland.

Genito-Urinary System.—Frequent micturition of clear urine, or highly coloured and scanty; bloody urine; pain in the kidneys; heat, burning, and tensmus in bladder; menstrual colic, with painful micturition; Amenorrhœa in young girls, with dropsical condition; suppression of menses, from cold; Dsymenorrhœa with urinary suffering; premature and profuse menses (also *Calc.*,-*C.*); retarded and scanty, or profuse menses (also *Sep.*); irregular menses; Leucorrhœa instead of menses; Chlorosis; ailments at the change of life; ulceration of uterus; nausea during pregnancy, or from pain in kidneys; dropsy from disease of kidneys or uterus; catarrh of Bronchi, with expectoration of mucus, thick yellow or bloody from suppression of the menses. Congestion and inflammation of the kidneys; Nephritis; renal colic; tenesmus of the bladder; inflammation of the bladder, or its neck; enlargement of the prostate gland; chronic Prostatitis.

Analogues.—*Sang.*, *Helon.*

99.—Sepia—*Sepiæ Succus—Inky Juice of the Cuttle-fish.*

The Sepiæ are molluscæ found in the Mediterranean. In the abdominal cavity is a sac containing a dark-brown juicy substance, with which the animal darkens the water to elude an enemy, or to capture prey. The powerful properties of this liquid, dried, are developed by trituration. The sepia of painters is not suitable for our use.

Leading Uses.—Chronic functional disorders of women, especially during the period of ovario-uterine activity; diseases of the *Skin* and of the *Liver*.

Head.—Periodic congestive headache, with sticking, heavy pain, and sometimes nausea and Vomiting; sick headaches of ruddy women; Hysteria; flushes of heat. *Respiratory System.*—Cough, with grayish-white and salty expectoration; some catarrhal affections of the air-tubes. *Digestive System.*—Indigestion with rotten eructations; acidity; Constipation, Prolapsus, and hæmorrhoidal fulness, associated with uterine derangements. *Generative System.*—*Scanty menstruation*, profuse, watery, and offensive, followed by green *Leucorrhœa*,

and Menorrhagia, from venous congestion; *Amenorrhœa*, with gastric derangement, weariness, and Palpitation; Retroversion, etc., of the uterus; subacute stage of Gonorrhœa in females. *Skin.*—Itching pimples, producing a roughness and cracking of the skin, principally affecting the joints; perspiration under the arms and on the soles of the feet, having a peculiar smell, in nervous women; yellow skin and brown spots; Ringworm.

Characteristics.—*Sepia* is best adapted to cachectic women of delicate organisation, torpid functional action, who are liable to skin affections, sensitive to cold air, apt to be chilly, suffer from uterine derangement, mental depression and physical exhaustion, and are of mild disposition, inclined to melancholy and tears.

Analogue.—*Puls.*

100.—Silicea—*Silex—Flint.*

Silicea is insoluble in water, acids, and nearly all liquids; hence it is of no service to the physician till trituration has developed its latent curative virtues.

Leading Uses.—Disorders, generally chronic and organic rather than functional, affecting the cellular, mucous, lymphatic, and osseous systems. In its influence over suppuration—promoting when necessary, and controlling when excessive—*Sil.* is probably second to no other remedy. Teste thinks it is especially suited to fat persons, of a lymphatico-sanguine temperament. But its use is by no means limited to these.

General System.—Sweat about the head only, and most during early sleep, and general tenderness of the surface—symptoms of *Rickets;* disposition to throw off clothes at night; want of vital warmth; yielding disposition, faint-hearted, anxious. Headaches, which are relieved by wrapping up warmly. Phthisis Pulmonalis and chronic Bronchitis, with very profuse expectoration, Hectic fever, etc. *Digestive System.*—Decay of the teeth, and Toothache from that source, the pain being increased by warm food, and by inhalation of cold air, and most violent at night. *Glandular System.*—

Cachectic conditions in which the glands not only enlarge, but go on to slow, torpid suppuration. *Osseous System.*—Caries and exfoliation of bone; Tabes Dorsalis. *Cellular System.*—Enlargement and white swelling of joints; Enchondroma; Ganglion; Housemaid's knee. *Skin.*—Eruptions from a diseased condition of the sebaceous follicles, characterised by a secretion of yellowish lymph, forming incrustations; Impetigo Capitis; suppressed, or excessive, perspiration of feet, etc. *Whitlow* (probably the best remedy); scrofulous *Abscesses* and *Ulcers*, spongy and readily bleeding, or torpid, with callous edges, and secreting unhealthy pus.

Analogues.—*Calc.-C.*, *Calc.-Phos.*, *Ac.-Phos.*, *Phos.*, *Hep.-S.*

101.—Spigelia Anthelmia—*Worm-grass—Indian-pink.*

A native of the West Indies and South America. We make a tincture from the dried herb.

Leading Uses.—*Rheumatic* affections of the heart; neuralgic headache, involving the eyes and teeth; and some worm-affections.

Head, Eyes, etc.—Hemicrania, and other neuralgic headaches, aggravated by motion, noise, or stooping; *Prospalgia.* Severe pain in and around the eyes, extending deep into the sockets, with great sensitiveness to light; severe Photophobia from ciliary nervous irritation; Conjunctivitis and Iritis in children of a strumous diathesis. Darting, stabbing, or lacerating pains in the face, with similar pains in the heart. Toothache or faceache with Palpitation; similar pains down the arms; neuralgic Hemicrania, the pain being increased by motion, noise, and stooping; Neuralgia of the *trigemini* in cold damp weather, pains on the *left* side of the face, etc.

Circulatory System.—*Rheumatic Inflammation* of the heart, either simple, or as a complication of Acute Rheumatism; chronic rheumatic affections of the heart, with violent action of the heart, irregular pulse; Angina Pectoris.

Digestive System.—*Worm-affections*, with vertigo, forgetfulness, depressed spirits, palpitation, pinching Colic, itching at the anus, Enuresis, and lassitude.

Analogues.—*Bry.*, *Cina.*

102.—Spongia Tosta—*Roasted Sponge.*

This medicinal product is obtained by roasting the best unbleached Turkey sponge until it has become brown and friable. *Iodine* is a considerable ingredient in the composition of *Spong.*; nevertheless, the two remedies may not be used indiscriminately; for the former has a much wider range of action.

Leading Uses.—Affections of the larynx, trachea, testes, and ovaries.

Respiratory System.—Dryness of the larynx, with *dry, hard, barking cough,** worse at night, and excited by a tickling and burning sensation; *Hoarseness*, with dry cough, and obstructed breathing; *Laryngitis*; laryngeal Phthisis; *catarrhal Croup* (alt. *Acon.*); painful, dry, hoarse, and croupy cough, such as frequently precedes, or follows, Croup; Bronchocele and *goîtrous enlargements* in children and young girls not requiring *Iod.*

Generative System.—Orchitis, and *Orchiocele*, the swelling being painful, and aching much, especially when unsupported; Menorrhagia in scrofulous females; etc. *Fibroid Tumours* of Uterus, with *Menorrhagia.*

In some valvular diseases of the heart it has been found useful.

Analogues.—*Iod.*, *Brom.*, *K.-Bich.*

103.—Staphysagria—*Staves-acre—Palmated Larkspur.*

We make a tincture from the seeds of this plant, which grows in the south of Europe.

Leading Uses.—*Nervous System.*—Nervous headache, with constrictive, boring, or pressive pains in the forehead, and acute stitches in the temples; Neuralgia of the face and forehead, on both sides; neuralgic pains of the shoulder-joints and arms. *Eyes.*—Smarting pains in the eyes, coming on in the evening; some ophthalmic conditions; Hordeolum, to

* Several cases of cure of coughs of dogs by this remedy have occurred in our experience.

prevent recurrence. *Digestive System.*—*Toothache* from decayed teeth or stumps, aggravated by cold air, cold drinks, or eating; teeth rapidly decay, become black, exfoliate, and the gums easily bleed. *Genito-Urinary System.*—Irritability and catarrh of the bladder; *Nocturnal Emissions* with sexual excitement; drawing sensation in the spermatic cord, and aching pain in the testes from walking; Spermatorrhœa, with chronic inflammation of the prostatic portion of the urethral mucous membrane; Impotence. *Skin.*—Herpetic eruptions.

ANALOGUE.—*Coff.*

104.—Stramonium—*Thorn Apple.*

The Datura Stramonium has its habitat in Europe, Asia, and North America. A dark greenish-brown tincture is made from the fresh plant when in flower and fruit, or a yellowish one from the seeds.

LEADING USES.—Affections of the brain and nervous system. It resembles the action of *Bell.*, but while the congestion to the head is less, the delirium is more ferocious.

NERVOUS SYSTEM.—Dementia, especially of drunkards and epileptics; *Acute Mania*, and *Delirium tremens*. It frequently removes the raving excitement, and induces sleep, from which the patient awakes quite rational. In Epilepsy and Chorea it is one of the best vegetable medicines, but often requires, in chronic cases, to be supplemented by one of the mineral remedies—*Zinc.*, *Cup.*, etc.; Prosopalgia. Stammering and stuttering may be greatly benefited by a prolonged use of *Stram.*

RESPIRATORY SYSTEM.—Spasmodic Asthma. For this affection it is recommended to smoke *Stram.*, and to draw the fumes into the lungs.

GENERATIVE SYSTEM.—Nymphomania; Puerperal Mania.

SKIN.—Petechial rash, especially on the chest and back; eruption caused by irritation of the spinal nerves. Morbus Coxæ.

ANALOGUES.—*Bell.*, *Hyos.*, *Cann.-Ind.*

105.—Sulphur—*Sulphur—Brimstone.*

A trituration is prepared from the washed *Flowers of Sulphur;* also an alcoholic tincture which contains about one per cent. of the drug.

Leading Uses.—Diseases of the skin and mucous membranes; affections resulting from constitutional cachexia—*Scrofula,* etc.; complications arising from the non-development or retrocession of eruptive diseases, ill health of children and others without definite disease, especially where associated with alternate Constipation and fœtid Diarrhœa.

Sulphur is very valuable (1) *in commencing the treatment* of many *chronic diseases;* (2) as an *intercurrent remedy,* during a course of treatment; (3) as a means of arousing dormant energies, and rendering the system susceptible to the medicines indicated; and (4) *after acute disease* in any organ. When the part is left gorged with venous blood, and the arterial blood has not recovered its due balance, *Sulph.* completes the cure. In all deep-seated chronic maladies it is of essential service, either as the main remedy, or as an adjunct to others. But *Sulph.* rarely cures alone. If it be continued above a week or two, progress is generally arrested, and some other medicine must complete the cure.

Nervous System.—Neuralgic shooting-pains, chronic headache, trembling weakness, rigidity of the joints, etc.—arising from repelled cutaneous disease; hot flushes down the spinal column; Nightmare, with palpitation, in cachectic persons; etc.

Head.—Chronic headache, with congestion—aching fulness, and vertigo. Cerebral congestion, or vertigo, from *suppressed Piles.* Chronic congestive headache; "*excess of venosity,*" and consequent diseases. Chronic Hydrocephalus.

Eyes.—*Scrofulous* and *Gonorrhœal Ophthalmia,* with superficial Corneitis, the pinkish zone well marked around the edge of the cornea, and Photophobia (also *Merc., Spig.*). Scurfiness of the eyelids; Stye; Chronic Sore eyelids, with itching and smarting, in unhealthy persons.

Ears.—Sores behind and about the ears, with itching; partial deafness, with roaring noises, and sweating or moisture and frequent itching in the ears.

Face and Nose.—Pimples on the face—*Acne* (int. and ext. use). Acute Nasitis; erysipelatoid and chronic inflammation of the nose, with swelling and illusions of smell.

Circulatory System.—Increased pulsation of the aorta, from the heart to the clavicle, with purring noise; when lying on the back, pulsations are felt in the abdominal aorta; abnormal irritability of the heart, with palpitation, as in hysteric patients of an unhealthy or scrofulous constitution; palpitation from suppressed Piles.

Respiratory System.—*Catarrh* with confusion of the head, weariness, and prostration of the limbs; Catarrh of Measles, etc.; chronic Catarrh, and tendency thereto, attacks occurring from the least exposure to unfavourable changes of weather, with sneezing, soreness of the nose, Hoarseness, tightness of the chest, and acrid, mucous discharge from the nostrils; chronic paroxysmal Cough, at night, with expectoration of thick phlegm, excited by tickling in the larynx; chest symptoms from suppressed eruptions or Piles; oppression and anxiety in the chest, with aching, sore spots, dull stitches, and weight and pressure in the chest; *scrofulous Consumption* in patients with rough, unhealthy skin, or having itching vesicles; excessive, and foul-smelling, purulent *expectoration* (see *Acidum Sulphurosum*); mild *Hæmoptysis* in Bronchitis, with fœtid expectoration; chronic Hæmoptysis, and *chronic Pneumonia*, in scrofulous and phthisical persons; plastic Pleurisy; chronic Asthma, alternating with eruptions on the skin, etc.

Digestive System.—Soreness, swelling, and cracks of the lips and corners of the mouth; warty excrescences on the lower lip; sour, bitter, and clammy taste, with yellow coating on the tongue; painful swelling of the tongue; Heartburn, sense of weight in the stomach, weariness after eating, and other symptoms of *Chronic Indigestion* in scrofulous persons; in obstinate hysteric vomiting (in a high dilution); *Chronic Constipation* (also *Nux V.*) either with or without Piles; fæces hard, dry, dark, expelled with straining, and sometimes streaked with blood; Diarrhœa—fœtid, watery, with fœtid flatulence, and alternating with Constipation, in scrofulous patients, or from enlargement of the mesenteric glands;

Ascarides, with itching and burning of the anus, in unhealthy children; bearing-down pain about the anus, and *Piles*, dependent on abdominal plethora (alt. *Nux V.*), with burning at the anus and tenesmus; soreness, excoriation, itching, or exudations about the anus; bleeding Piles, with hæmorrhage of dark venous blood, and Constipation.

Urinary System.—Frequent desire to pass water during the day, and Enuresis at night (compare *Ferr.*) in scrofulous children.

Generative System.—Weakness of the sexual organs, with excitement and swelling, in the scrofulous. Profuse black, clotted, and gluey menstrual discharge; slimy, yellowish Leucorrhœa; constitutional tendency to Prolapsus, Miscarriage, ulceration of the breasts, or sore breasts and nipples.

Rheumatic and Gouty Affections.—Chronic *Gouty* (action) *and Rheumatic affections*, with drawing, tearing, or boring pains, or pains as if the parts were sprained, and itching about the painful parts; tensive pains in the joints and muscles; rheumatoid pains, waking the patient early, and preventing sleep again; *Chronic Lumbago and Sciatica*, in persons who suffer from Constipation, Piles, or Varicose Veins.

Skin.—*Scabies*, *Acne*, Herpes Circinnatus, and Ringworm (internal and external use); *recent Prurigo*; Intertrigo, Crustea serpiginosa, and general eruptions in unhealthy children; chronic erysipelatous inflammation of the skin on various parts—the arms, legs, etc.—with burning and itching, and desquamation; *Boils* and *Whitlows*, frequently recurring; liver-spots; Chronic Ulcers, scrofulous or varicose, with much burning and itching, and discharge of fœtid pus; *Corns* and *Warts* which tend to inflame; icy-coldness of the feet, with burning of the face and hands.

Special Characteristics.—*Sulph.* is pre-eminently indicated in diseases affecting patients previously troubled with eruptions, Ulcers, Sores, and in diseases traceable to the scrofulous diathesis. The symptoms are worse at night, and in damp and changeable weather. In skin affections, the following are prominent indications: itching with burning, increased

by warmth and slight friction, but relieved for a short time by vigorous rubbing or by scratching.

Analogues.—*Hep.-S.*, *Calc.-C.*

106.—Taraxacum—*Dandelion.*

The entire plant, collected in the autumn, is employed in the preparation of the tincture.

Leading Uses.—Gastro-hepatic diseases characterised by dyspepsia; food, such as butter or meat, tastes unnatural; great chilliness after eating or drinking; *Tongue coated white*, but patchy, as if the mucous membrane was peeled off; flatulence in stomach and abdomen; aching sticking pains in liver and stomach; Constipation, with difficulty in expelling stools, though not hard; itching eruptions following gastric disorders.

107.—Terebinth—*Oil of Turpentine.*

Turpentine is obtained from several species of pine. We purify it for use by distillation.

Leading Uses.—The ganglionic nerves of the urino-genital system whose mucous membranes are involved, the mucous membranes of the urinary organs—the kidneys, bladder, and urethra. The ganglionic and senso-motorial nerves of the whole intestinal tract; nervous diseases of a chronic character; the skin, by external application; intestinal worms.

Nervous System.—*Delirium Tremens*, *Sciatica*, and chronic Rheumatism of the lower extremities.

Digestive System.—*Ulceration* of, and *Hæmorrhage* from, the bowel, especially in Enteric fever, when the tongue, instead of cleaning gradually from the edges and tip, parts with its fur quickly and in large flakes; Gastro-enteritis; *Tænia*, and other *worms*, with dizziness, pain at the top of the head, irregular appetite, deep-seated soreness, inflation and tension of the abdomen, etc.; scarlet eruption on the skin, with gastric disorder, from eating shell-fish.

Urinary System.—Acute congestion of the kidneys, with

suppressed urine, as from cold; *Acute Nephritis*, especially non-desquamative; Inflammation and Catarrh of the bladder; *gonorrhœal Urethritis; post-scarlatinal Dropsy*, with inflammation, and urine smelling of violets; *Hæmaturia*, from congestion: in these affections a group of the following symptoms indicate the use of *Tereb.*:—Aching pain and weight in the loins, depressed muscular power, Vertigo, stupor, irritability of the bladder, difficult or painful emission of scanty red urine, especially when it contains blood, burning in the urethra, sensitiveness of the region of the bladder, loss of appetite, relaxed bowels, and abundant mucous expectoration.

Caution.—The indiscriminate use of *Turpentine* as an external application in Rheumatism, Burns, and Scalds, Wounds, etc., is frequently productive of most mischievous results.

Analogues.—*Canth.*, *Cann.-Sat.*

108.—Teucrium—*Teucrium Marum Verum—Cat Thyme.*

The entire fresh herb, which grows on the shores of the Mediterranean, is employed for the tincture.

Leading Uses.—*Polypi of the nose*, with thick greenish discharge; loss of smell; obstruction and fulness of the nose; for these disorders it may be administered by olfaction. Polypi of the Urethra; *Ascarides*, especially in adults; Psoriasis; dry scurfy eruptions; ingrowing toe-nails (external use).

Analogues.—*Cin.*, *Sant.*, *Sang.*

109.—Urtica Urens—*Small Stinging Nettle.*

A tincture is prepared from the fresh herb when in flower and seed, during the summer.

Leading Uses.—Diseases of the skin; Nettle-rash, occurring same time every year; affections the result of retrocession of Nettle-rash; vesicular Erysipelas; eruption and itching disappearing on lying down, reappearing after rising;

Burns and Scalds; deficient secretion of milk after Parturition, with protracted Lochia; Dysentery.

ANALOGUES.—*Rhus.*, *Canth.*, *Apis.*

110.—Uva Ursi—*Bear-berry.*

The plant is common in the Northern hemisphere. The leaves are employed in the preparation of the tincture.

LEADING USES.—Diseases of the kidneys and urinary passages; painful micturition; burning during micturition, showing bloody and purulent urine; intense aching in region of kidneys and ureters; weakness and sense of faintness after micturition.

ANALOGUES.—*Tereb.*, *Canth.*

111.—Valerian—*Valeriana Officinalis—Heal-all.*

The root of this plant, which is common throughout Europe, is employed for the preparation of tincture.

LEADING USES.—Hysteric affections; hysterical dyspnœa and Chorea; Hyperæsthesia of all the senses; Hypochondria; restlessness; fear in the dark; unnatural sensation as of flying in the air; stupefaction and constriction of the forehead, worse in evening and at rest, and in open air or sunshine, better in a room and on changing position; hysterical spasms, with choking and eructations of bitter rancid fluid, tasting like rotten eggs; sleeplessness, with much restlessness; pulse irregular, quick, small, and weak; profuse and sudden attacks of perspiration, especially on the face and forehead. It is especially suitable for women, and for periodical attacks occurring every two or three months.

ANALOGUES.—*Ign.*, *Stram.*

112.—Veratrum Album—*White Hellebore.*

The habitat of this plant is in the mountainous districts of Europe. The tincture is prepared from the root-stock.

LEADING USES.—*Asiatic Cholera,* with violent vomiting and

purging rather than with extreme prostration or collapse (also *Ars.*); choleraic Diarrhœa; Cramps of the abdomen or of the *calves* of the legs, whether or not occurring during Cholera, the muscles being drawn up into knots; third stage of Whooping-cough; Ague, with extreme coldness.

Special Indications. — General coldness, with blueness, debility, sunken and pinched features, fixed, lustreless eyes, *Cramps*, faintness and faintings, feeble, almost imperceptible *pulse*, *cold tongue* and breath, *cold sweats* and great thirst; also *watery Diarrhœa*—rice-water evacuations—and *dysuria*, with coldness and blueness of the extremities, as in Cholera; excessive vomiting and *black vomit*, as in Yellow Fever.

Nervous System.—Hypochondriac depression of spirits; confusion of mind, Dementia, and absurd fancies; or furious Mania. It is probably only suited to mental diseases due to some functional irregularity elsewhere than in the brain, as in Mania from menstrual derangement, Nymphomania, Puerperal mania, etc.

Circulatory System.—Thready, intermittent, and irregular pulse, with feeble action of the heart, occurring in weak persons disposed to fainting, with coldness and blueness of the extremities; palpitation and Angina Pectoris, with similar symptoms, and great anguish.

Respiratory System.—Spasmodic suffocative cough, with blueness of the face, and great retching; Whooping-cough; chronic Bronchitis in old persons, and spasmodic Asthma.

Digestive System.—Pain after food, and Water-brash, with coldness of the face and extremities; excessive retching and vomiting, and involuntary watery Diarrhœa, with cramps in the abdomen, or nocturnal Diarrhœa, with coldness, pinched appearance, etc.; *Autumnal Diarrhœa*, the evacuations being expelled in forcible gushes, with vomiting, and great prostration.

Analogues.—*Ars.*, *Ver.-Vir.*, *Acon.*, *Camph.*

113.—Veratrum Viride—*Green (American) Hellebore.*

A plant indigenous to the mountainous districts of the United States, known by the common names of *Indian Poke-* and *Itch-weed*. We prepare a tincture from the root.

Leading Uses.—Febrile, irritative, inflammatory disorders. *Simple fever*, without local inflammation, but accompanied by vertigo, headache, dimness of sight, nausea, weakness, and restlessness; *Infantile Remittent Fever*, with drowsiness, throbbing of the temporal arteries, hard, quick pulse, vomiting of mucus and bile, and Constipation; the invasive stage of *Scarlatina*, and other *toxæmic fevers*, with much involvement of the head, high fever, and the symptoms above mentioned; in these cases, the circulatory excitement and gastric irritation being beyond the scope of *Acon.*, *Ver.-Vir.* is an excellent substitute, especially when the typhoid conditions calling for *Bapt.* are not threatened. As an anti-spasmodic, it has great power over the muscles and nerves of motion, mobility in some cases of physiological action being perfectly lost. Dr. Burt believes it will prove to be a complete antidote to the spasms produced by *Strychnine*. He also affirms its wonderful power in curing *Chorea*, in consequence of its specific action on the muscular system. In many points, the pathogenetic effects of *Ver.-Vir.* resemble those of *Ver.-Alb.*, and in others, *Acon.* It differs, however, from the latter, in the following grand essentials, as chiefly pointed out by Dr. Burt:—

VERATRUM VIRIDE.	ACONITE.
1. Centres its action on the cerebro-spinal system; especially affecting the pneumogastric nerve, and by paralysing its functions, produces congestion and inflammation in every organ and tissue to which it is distributed. Its action upon the great sympathetic is only incidental.	1. On the contrary, centres its action in the ganglionic nervous system; through this it paralyses the heart and capillary blood-vessels so as to produce congestion in every tissue of the body that contains capillaries.
2. Cures congestion and inflammation of the brain, and the organs that are under the immediate control of the *par vagum*. This, it will be seen, makes its sphere of usefulness much less than that of *Acon.*	2. Cures congestion and inflammation in every organ and tissue in the body.
3. *Ver.-Vir.* is only useful in those diseases that have their starting-point in the cerebro-spinal nervous system.	3. Diseases that call for *Acon.* have their starting-point in the great sympathetic.

Febrile Conditions.—It is specially indicated in fevers complicated with cerebral excitement. *Inflammatory condi-*

tions, where there is a complication with the stomach; catarrhal fevers with nausea and, perhaps, vomiting at the onset. *Rheumatism* of the left side of the body—shoulder, back of the neck, arm, side, hip, knee, and leg—with fever, white-coated tongue, restlessness, and great pain, especially on movement: profuse perspiration and refreshing sleep frequently follow its use in these cases. In *Pneumonia*, Dr. Hale considers it better than *Acon.*, administered in alternation with *Phos.*; but *Ver.-Vir.* should be discontinued immediately the pulse falls to its normal rate.

Head.—In *Congestive Headache*, it is believed to be superior to any other known drug, when the congestion arises from plethora, Sun-stroke, alcoholic stimulants, *Teething*, etc., or from suppressed discharges. The symptoms are:—A sense of fulness and weight, throbbing, sometimes with stupefaction; increased sensitiveness to sound, with buzzing and roaring; double, partial, dim, or otherwise disordered vision; nausea and vomiting; tingling and numbness in the limbs; mental confusion, etc. *Convulsions* during dentition, or in the puerperal condition. Chorea.

Respiratory System.—Intense congestion and inflammation of the lungs, from paralysis of the motor filaments of the pneumogastric nerve; vesicular Bronchitis; Asthma, with great dyspnœa, and cold sweat on the face; it often gives great relief during an asthmatic paroxysm.

Circulatory System.—Cardiac debility, with fainting and collapse therefrom; palpitation with faintness, or dyspnœa.

Digestive System.—In general *gastric affections* it is superior to *Ver.-Alb.*, especially if there be much irritability of the stomach—vomiting—not purging—*pyrosis*, etc., and when the last-named symptoms occur during pregnancy; *bilious fever*, with vomiting of bile. Red clean stripe through centre of tongue, with a coating either white or yellow on both sides. Piles, with neuralgic pains in the rectum and anus.

Genito-Urinary System.—*Menstrual Colic*, *Puerperal fever*, *Metritis*, and *Mania*; hysterical convulsions.

Extremities.—Prickling and partial loss of sensation; complete loss of power; Paralysis of the legs; cramps; cramped fingers and toes, as in Cholera.

Skin.—In *vesicular Erysipelas* it may also be used externally —thirty drops of the strong tincture to half a pint of water —constantly applied to the inflamed surface: in this disease, the presence of arterial and cerebral excitement indicates this drug in preference to *Rhus*. Its *local use*, in a diluted form, is reported to have dispersed local inflammations, and cured Scabies, Shingles, and chronic skin-affections. Dr. Dalzell informs us that a compress saturated with a lotion of the concentrated tincture—℥j ad aq. destil. ℥vj—is valuable in Inflammation of the cæcum; also that *Inflamed Corns*, *Bunions*, etc., are greatly benefited by being touched with the strong tincture.

Special Characteristics.—If it acts at all, it acts promptly. Its effectiveness is marked, as with *Acon.*, by perspiration.

Analogues.—*Acon.*, *Bell.*, *Hell.*, *Ver.-Alb.*, *Ant.-T.*

114.—Viola Odorata—*Sweet Violet.*

The entire fresh plant, which is common in Europe and Russian Asia, is employed for preparation of the tincture.

Leading Uses.—Hypochondriacal and Hysterical complaints, with great nervous debility and relaxation of the muscles; weakness of memory; Congestion of blood to the Head, with vertigo when sitting; head feels heavy and falls forward as from weakness of muscles of back of neck; aversion to music. Diseases of the *Respiratory Organs* in feeble subjects, with disposition to hoarseness from relaxation of the parts; violent shortness of breath, with sensation as of a stone at the chest, and painful expirations, worse by day than night; anxiety and Palpitation of the Heart; *spasmodic cough and dyspnœa:* paroxysmal Cough, like Whooping-cough, with expectoration like jelly, clear or ropy, worse by day than by night; Cough from suppressed eruptions; Rheumatism of joints of upper extremities, which are red, swollen, and painful on movement, more especially of *the right side of the body*. It is scarcely ever curative for left-sided rheumatic pains.

Analogue.—*Chel.*

115.—Viola Tricolor—*Heart's-ease—Pansy.*

The whole of the plant, which grows throughout Europe and Russian Asia, is used for preparing the tincture.

Leading Uses.—Diseases of the Skin; *Impetigo*, especially Milk crust; burning, itching, scabby eruptions, discharging yellow watery fluid; Tinea Capitis.

Analogue.—*Lyc.*

116.—Zincum—*Zinc.*

We use either the metal itself—*Z. Metallicum*, its sulphate—*Z. Sulphuricum*, or its oxide—*Z. Oxidatum.*

Leading Uses.—*Zinc.* corresponds to a *depressed*, *exhausted*, and *irritable* condition of the *nervous system*, indicating a want of tone, such as may arise from a variety of causes, principal among which are injuries, sexual excesses, mental exertion or trouble, insufficient food or exercise producing Anæmia, exhausting diseases and affections of the uterus and its appendages. Chronic Headache; nervous depression, etc., with twitchings or tremblings of different parts of the body, and disinclination to activity, and other symptoms of a torpid circulation.

Nervous System.—*Cerebral Depression. Melancholia*, apathy, and weak excitability; Hysteria; chronic Atrophy of the brain; incipient Paralysis of the brain; Paralysis agitans; Paralysis of the brain in Scarlatina, or Acute Hydrocephalus; Infantile Convulsions, with a depressed fontanelle; Chorea; Epilepsy; Chlorotic Cephalalgia; aversion to labour, vacant expression, silly and even idiotic talking, defective memory, dimness of sight, and weakness, heaviness, or jerking of the limbs; neuralgic pains; dry atrophy, without hectic; Somnambulism; disturbed dreamy sleep, with jerking of the muscles, etc.

Head.—*Chronic Headache*, with violent, obstinate pain, and depression of spirits; vertigo, especially in the occiput.

Fever.—Ague, with repeated rigors, malaise, nausea, and constriction of the chest, followed by a short hot stage, and profuse sweating.

Respiratory System.—Dry, spasmodic Cough, and Pneumonia, with violent stitches in the chest on taking an inspiration, and expectoration of blood-streaked, tenacious mucus; convulsive Asthma.

Digestive System.—Cardialgia, chronic vomiting of food, with little retching, flatulence, acidity, and obstinate Constipation, with hard stool. In Diarrhœa of infancy and childhood, *Zinc.-Oxide.* 1x to 3x, given after food, to avert nausea, is remedial.

Urinary System.—Profuse, light-coloured urine, with light flocculent phosphatic sediment.

Generative System.—Chronic Gleet; irritability of the organs, or primarily of the nerve centres, resulting in too rapid escape of semen during connexion, or nocturnal emissions; eruptions following suppressed Gonorrhœa.

Skin.—Obstinate Pimples, with soreness; chronic and ulcerated Herpes; etc.

Analogues.—*Cup.*, *Plumb.*

Antidotes.

In the event of an over-dose of the medicines prescribed in this work having been administered, *two drops* of the *Tincture of Camphor*, or a strong infusion of *Coffee*, will generally arrest any unpleasant consequences. *Camphor*, however, increases the action of *Hydras.* and *Cimic.* For the general treatment of cases of poisoning, Part V. should be consulted.

PART V.

Poisons (*Venena*).

The word *poison* seems to have been originally a variation of *potion*, and has come now by general consent and usage to designate any substance which, through the blood, has a deadly or noxious action upon living beings. Some poisons act in minute, others in comparatively large, doses. The former are termed *deadly*, being often rapidly fatal in small doses.

The primitive use of poisons was for the purpose of anointing arrows: hence the Greek word for poison (τοξικόν) derives its origin from (τόξον), which signifies a *bow*. This custom dates from the earliest antiquity, when men earned their means of subsistence by the bow, and is prevalent among savage tribes to the present time.

Poisons have been arranged by toxicologists into three groups, according to their action upon the animal economy, as follows:—

I. Irritant Poisons, or those which produce irritation or inflammation, causing pain in the stomach and bowels; as, the mineral acids, oxalic acid, arsenic, mercury, copper, antimony, zinc, lead, baryta, and cantharides.

II. Narcotic Poisons, or those which produce stupor, delirium, and other affections of the brain and nervous system; as, opium, hydrocyanic acid, and poisonous gases.

III. Narcotico-irritant Poisons, or those which produce sometimes irritation, sometimes narcotism, sometimes both together; these are chiefly derived from the vegetable kingdom, as strychnia, monkshood, and poisonous fungi.

But it is to be remembered that the chief irritant poisons, like the narcotics, have a specific *remote* poisonous effect upon the blood, nervous system, and body generally, besides their local irritant operation upon the part to which they are immediately applied.

In cases of suspected poisoning, symptoms should be carefully watched and noted; the evacuations should be inspected; the vomit and urine submitted to chemical examination; and if death occur, a *post-mortem* examination should be made.

In our observations on the most common poisons, our aim has been to embody such practical points as are most necessary to be remembered. The following is the list included in this chapter:—

List of Poisons.—

	Page
Acid, Carbolic	969
—— Carbonic	985
—— Hydrochloric	967
—— Hydrocyanic	980
—— Muriatic	967
—— Nitric	967
—— Oxalic	968
—— Prussic	980
—— Sulphuric	967
Aconite	982
Alcohol	975
Ammonia	966
Antimony	964
——— Chloride of	965
Aqua Fortis	967
Arsenic	957
Belladonna	979
Brandy and other Spirits	975
Cantharis	985
Carbolic Acid	969
Carbonic Acid	985
Chloral Hydrate	979
Chlorate of Antimony	965
Chloroform	978
Colchicum	970
Copper	964
Corrosive Sublimate	964
Creasote	970
Deadly Nightshade	979
Digitalis	983
Ether	978
Foxglove	983
Fungi, Poisonous	984
Gases, Poisonous	985
Gelseminum	980
Hartshorn	966
Hydrate of Chloral	979
Hydrochloric Acid	967
Hydrocyanic Acid	980
Laudanum	971
Lead	962
—— Sugar of	963
Lemons, Salt of	969
Mercury	960
Monkshood	982
Morphia	971
Muriatic Acid	967
Mushrooms, etc.	984
Nitrate of Potash	965
Nitre	965
Nitric Acid	967
Nux Vomica	983
Oil of Tar	970
——— Vitriol	967
Opium	971
Oxalic Acid	968
Phosphorus	966
Potash, Nitrate of	965
Prussic Acid	980
Salt of Sorrel	969
—— Spirit of	967
Saltpetre	965
Sorrel, Salt of	969
Spanish Fly	985
Spirits of Wine	975
Strychnia	983
Sugar of Lead	963
Sulphuric Acid	967
Tar, Oil of	970
Tartar Emetic	964
Tobacco	983
Verdigris	964
Virtriol, Oil of	967
——— Blue	964

1.—Arsenic (*Arsenicum*).

White Arsenic, or Arsenious Acid, is an intensely irritant poison, *two* grains having been known to destroy life. When criminally employed, it is more commonly used for murder than for suicide, is generally taken crude in some article of food, and, in small quantities, has no appreciable taste. Hence it has often led to accidental poisoning. It has been sold for "Salts" or "Magnesia," and used instead of the plaster-of-Paris in the adulteration of sweets. In farming districts, second-hand stone jars have repeatedly proved dangerous. The late Mr. Freeman reported two cases in which stone jars were used for the storage of wine or jam, which had previously been used for the solution containing Arsenic employed in sheep-dipping, and in each instance serious illness resulted, proving fatal to one man. It is sparingly soluble in cold water, two and a half parts only being taken up by 1,000 parts of water.

Symptoms.—These come on, if the dose has been moderately large, in about an hour after the poison is taken; but the time and also the severity of the symptoms vary according to the state of repletion of the stomach at the time, and the digestibility of the vehicle in which it is swallowed. There are faintness, nausea, great pain and burning heat in the stomach, an incessant desire for cold drinks, and violent vomiting of brown matter streaked with blood. By vomiting, much of the poison may be ejected, together with the common contents of the stomach, and a great deal of mucus, which is probably secreted as a defence. The skin is generally cold and clammy, but has sometimes been found very hot. In fatal cases the countenance becomes pale, sunken, and expressive of great torture and anxiety; the pulse grows small, feeble, rapid, and soon imperceptible. The pain spreads over the abdomen, which becomes tense and tender, sometimes swollen, sometimes drawn in at the navel; diarrhœa comes on with severe tenesmus, and sometimes bloody evacuations; there is also strangury, priapism, and congestion of the testicles. Finally, difficulty of breathing supervenes, the conjunctivæ become dry, red, swollen, and injected, and

delirium, stupor, or convulsions precede death, which usually occurs on the third day, unless a large quantity has been taken, when the patient suffers much less, and sinks in about twenty-four hours.

If the patient survive the third day, or has had small doses frequently repeated, he will suffer from Muco-enteritis and Gastritis. Even if he finally recover, he will long experience pain in the abdomen, imperfect digestion, sickness, emaciation, falling off of the hair, and other symptoms of chronic arsenical poisoning.

Treatment.—Evacuate the contents of the stomach by an emetic (3j zinci. sulph. :—tartar emetic should be avoided), or by tickling the throat with the finger or a feather; this is better than the stomach-pump, because *Arsenic* is heavy and somewhat insoluble, and would not probably be washed up. If, however, vomiting be already severe, fluids (*cold, never warm*) are only necessary to assist in clearing the stomach; the best being milk, which is bland, and may partly coagulate in the stomach and envelope the poison. Taylor recommends equal parts of oil and lime-water. These may be given both before and after the vomiting has begun. A dose of castor oil to clear away any of the poison that has left the stomach and entered the bowel, may be of service. Linseed tea and other farinaceous decoctions are also useful; they may be thickened with magnesia, with which *Arsenic* forms an insoluble compound. A chief source of danger in arsenical poisoning is the want of any effectual antidote; the *Hydrated Peroxide of Iron*, which may be produced in a moment by addition of Liq. Ammoniæ to Tincture of Iron, has the most repute, but is so little to be depended on that it should be postponed until after the stomach has been cleared as far as possible by vomiting. M. Carl affirms that hydrated Magnesia, or a mixture of Magnesia and sugar, may be relied on in arsenical poisoning. Poultices and fomentations should be applied over the abdomen.

Tests for Arsenic.—Place a piece of *bright copper* foil in a test-tube, cover with pure Hydrochloric Acid, and apply heat. If the foil remain bright, we have evidence that the *acid* and *copper* do not contain *Arsenic*. Add an equal quantity of the

suspected fluid, and apply heat again. If *Arsenic* be present in the fluid, the copper will now turn white or grey. On evaporating the moisture from the surface of the copper foil, and slowly heating it in a test-tube, a ring of *Arsenic* will be deposited on the cooler part of the tube.

If ammonio-nitrate of silver be added to the solution, a rich arsenite of silver will be precipitated, changing to greenish brown.

The addition of ammonio-sulphate of copper to the solution will precipitate the rich green brown as Scheele's green, or arsenite of copper.

Arsenical Wall-Papers.—This subject has occupied much public attention; and unquestionably a very large number of affections have been clearly traced by the profession to the use of such papers, while Dr. Stenhouse and others have, on analysis, discovered in them quantities of arsenic, varying from a trace to 14 grains in the square foot. And where papers and articles of clothing are not coloured by arsenic, the bright aniline dyes are sometimes fixed by an arsenical mordant. The prominent symptoms induced are very similar to those of Hay-Asthma, and may be thus summarised: *Eyes*—bloodshot, sore, smarting, dim, photophobia; *Nose*—red, swollen mucous membrane; itching, smarting, with constant flow and sudden fits of sneezing; *Mouth*—soreness, ulcers, loss of taste; *Tongue*—dry, white; *Voice*—nasal; *Face and teeth*—neuralgic pains; *Forehead*—sense of weight in frontal sinuses; *Throat*—soreness, dryness, nauseating greasy impression at the back; *Lungs*—bronchial affections; *Stomach and Bowels*—indigestion, thirst, retching, vomiting, diarrhœa, dysentery; *Skin*—irritation, eruptions, boils; *Muscles and Bones*—sufferings simulating Rheumatism; *Brain and Nervous System*—irritation, occasioning great irritability of temper; depression of spirits; Neuralgia; *Urine*—scanty and highly coloured; all ailments intensified at night; general prostration and slow emaciation. The Turkish-bath, in suitable cases, is said to be a valuable agent in eliminating the poison.

Test for Wall-Paper.—Place a drop of Aqua Ammoniæ on the suspected paper, and if it change the colour to *blue*,

the probability is that copper and *Arsenic* are present. But a more satisfactory test is applied as follows :—Place a small piece of the material in a test-tube, pour in about a drachm of dilute hydrochloric acid, and boil it over a spirit lamp. The acid dissolves the arsenite of copper and assumes a green colour. Pour off the liquid into another test-tube, and add a few drops of hydro-sulphate of ammonia, and pass hydro-sulphuric acid through the liquid. A copious brown precipitate forms; this is mainly composed of copper sulphide with which the arsenic sulphide is mixed. Now add an excess of liquor ammoniæ; this dissolves the arsenic sulphide, but not the copper sulphide. The ammoniacal solution of the arsenic sulphide is separated by filtration, and now the neutralisation of the ammonia by hydrochloric acid throws down the yellow sulphide of arsenic.

2.—Mercury (*Hydrargyrum*).

The most common mercurial poison is the bichloride—*Corrosive Sublimate*. In its action it differs from arsenious acid by being a chemical corrosive, combining with the albumen of the tissues; but it has also, like *Arsenic*, a remote specific poisonous effect.

Symptoms.—A horribly nauseous metallic taste, detected at the time of swallowing, and great constriction of the fauces and œsophagus, rendering even the swallowing of the antidote most difficult; the epithelium of the mouth and throat becomes white, as if from nitrate of silver, shrivelled and detached; vomiting of white, stringy mucus; copious diarrhœa. The pain in the stomach, and vomiting, come on earlier than from *Arsenic*, and blood is more likely to be brought up; the countenance becomes sometimes turgid and congested, at others pale and anxious, whereas from *Arsenic* it is always pale, contracted, and ghastly. Strangury, too, is a more marked symptom, because the *Corrosive Sublimate* being more soluble, enters the circulation freely, and reaches the kidneys; whereas *Arsenic*, remaining in the alimentary canal, causes its chief sufferings there; and, passing down to

the rectum, renders tenesmus a more prominent symptom. If recovery take place from mercurial poisoning, salivation first occurs. There is but little difference in the fatality of *Corrosive Sublimate* and *Arsenic*—three grains of either may destroy life.

Tests for Corrosive Sublimate.—*Powder.*—If a small quantity be dropped into a white saucer containing a solution of Iodide of Potassium, it becomes *scarlet;* of Hydro-Sulphuret of Ammonia, it becomes *black;* of Potash, it becomes yellow. *Solution.*—A small quantity should be gently evaporated, then allowed to crystallise. Opaque silky prisms will thus be formed, intersecting each other. If Iodide of Potassium be dropped on them, they become scarlet.

Treatment.—This differs radically from that of *Arsenic*, inasmuch as we have an effectual antidote, which should, therefore, be administered immediately: this is the whites and yolks of eggs, beaten up together. They convert the bichloride of Mercury into a double chloride of Mercury and albumen. If eggs cannot be had, a thin paste of flour and water may be substituted,—the gluten acting in the same manner as albumen. Milk may also be given as a substitute. Afterwards, bland fluids, the use of the stomach-pump, and other treatment, according to the requirements of the case.

For the *Salivation* which follows, we have several remedies: *Ac.-Nit.* (two drops of the dilute acid in a little water, two or three times daily; also gargles of lukewarm water, acidulated with the acid); *Ac.-Sulph.* (also internally and as a gargle); *Alum* in solution (ʒij of the powder to ℥iv of water, sweetened with a little honey) for a gargle. The patient should be warmly covered, and have all the nourishment he can take in the way of bread and milk, broths and soups. *K.-Chlor.* is also recommended for its beneficial influence in salivation, and is used both internally and as a gargle. *Hep.-S.* is an efficient remedy for chronic mercurial eruptions and ulcers; and for the latter, *Hydras.; Nux V.* for mercurial tremor and Paralysis; *Ars., Iod.*, etc., for the affections of the bowels; *Aur.* for mercurial cachexia, bone disease, etc.

The latter symptoms are those of chronic mercurial poison-

ing, such as are experienced by looking-glass makers, or by others who are constantly exposed to mercurial vapours.

3.—Lead (*Plumbum*).

The most common form of Lead-poisoning is the chronic, as seen in house-painters, glaziers, and others who use lead in their trades, or work in lead mines, or who habitually drink water, cider, or other liquids contaminated with it. In the case of painters, that variety of paint which gives a dead or non-glistening surface is the most poisonous, from the large admixture of turpentine, which, passing off by evaporation, carries with it a portion of the lead; this is inhaled, or mixed with the saliva, and received into the stomach, or settles on the skin and is absorbed. In such cases the source of the lead may be little suspected. Cases are not unfrequent among ships' cooks, who stand constantly with naked feet on a sheet of lead before the galley fire; and charwomen may be affected from frequently washing stairs covered with sheet-lead, as in some hotels.

Symptoms.—Vomiting, thirst, habitual constipation, and occasional severe colic; Paralysis of the extensor muscles of the forearm, so that the hands hang down by their own weight (*drop-wrist*), the patient having no power to raise them; general chilliness, pallor, and emaciation; contracted blood-vessels, and blood deficient in red corpuscles. The Palsy is at first local, but if the cause be not avoided, the patients fall into a state of general cachexia, become miserable cripples, and eventually sink under disease of some vital organ. A striking diagnostic sign of lead-poisoning is the existence of a dark-blue line round the edges of the gums, most marked in the lower jaw. This line is probably caused by a deposit of sulphuret of lead in the gum-tissue, the sulphuret being produced by the sulphur, which is evolved from decomposing fragments of food in the clefts of the teeth, and which combines with the salts of lead in the blood.

On dissection and analysis, the lead may be found in the tissues of the nerves and muscles.

TREATMENT.—*Iodide of Potassium* is useful to remove the lead from the system in the form of the iodide in the urine; for although iodide of Lead is insoluble in water, it is soluble in urine and other fluids of the body.* The *Bromide* has even greater solvent power than the *Iodide*, and is preferable when there is sleeplessness. Another method of cure is to give frequent doses of *Mag.-Sulph.* (*Epsom Salts*), with excess of *Ac.-Sulph.* For *lead-colic—Opi.*, *Alum.*, *Plat.*, *Bell.*, or *Ac.-Sulph.*, with the warm bath, is the best treatment.

PREVENTIVE MEASURES are, chiefly, *great cleanliness*, using soap and water at frequent intervals, especially for the face, hands, and nails; and avoidance of taking food in the work-rooms or mines, or food which has been allowed to remain therein. The habitual use of a drink resembling lemonade, but acidulated with *Sulphurous Acid*, as provided for the artisans in some lead works, is probably the best means of correcting the morbid influence on the stomach; while the entrance of the poison into the air-passages should be guarded against by working with the mouth closed, or by wearing a fine respirator.

The same antidote may also be used against *Sugar-of-lead* —a salt not infrequently used for poisoning—the *Magnesia Sulphas* in this instance forming an insoluble and probably inert sulphate of lead.†

Owing to the facility with which soft water absorbs lead, pipes of this metal should not be employed for conveying water to houses. Much colic and lead poisoning at one time prevailed in Glasgow and Edinburgh from this source. Pipes made of block-tin, or lined with tin, should be substituted for leaden ones, particularly where the water is soft.

* "In Lead-poisoning," the late Dr. Newton wrote to us, "I greatly prefer the following treatment to the *Iodide of Potassium: Merc.-S.* 1, gr. ij morning and night, and *Nux. V.* 1 trit., gr. ij twice daily. By this method we avoid the depression of spirits and loss of appetite which the *Iodide* brings on."

† It is important to remember that all substances which are *insoluble* are not also *inert;* for although insoluble in water, they may be dissolved in the fluids of the mouth, stomach, or other parts of the body. Of this, *Calomel* may be cited as an illustration.

4.—Copper (*Cuprum*).

Poisoning from this metal usually occurs from food cooked in imperfectly-cleaned copper or brass vessels; the metal becomes oxidised, and then, not only the vegetable acids, such as vinegar and pickles, but also oils and fats of greasy foods, as hashes and stews, from the fatty acids they contain, dissolve the metal, and form acrid, irritant, poisonous compounds, such as *Verdigris* (the acetate of copper), *Blue Vitriol* (sulphate of copper), etc.

These are the most common salts of copper; but, though highly poisonous, they seldom prove fatal, owing to their emetic properties.

Symptoms.—They resemble those caused by *Arsenic* and *Corrosive Sublimate*, with some that are peculiar to the metal itself, especially violent headache, then vomiting of blue or green matters, and cutting pains in the bowels, and afterwards cramps in the legs, pains in the thighs, etc. Jaundice very frequently occurs, and the symptom is the more important from being seldom met with in other cases of poisoning. Death is generally preceded by convulsions and insensibility. A chronic form of poisoning has occurred from the water on shipboard being contaminated by copper; in such cases the perspiration of the infected person has stained the linen of a greenish hue.

Treatment.—The best antidote in acute poisoning is *albumen*—the whites and yokes of eggs beaten up—which when administered forms an insoluble compound with the copper salt; it should be followed by milk, or mucilaginous drinks. In the absence of eggs, a thin paste of flour and water may be used. Emetics and the stomach-pump are seldom serviceable.

5.—Antimony (*Antimonium*).

Poisoning with *Antimony* is uncommon, but it does sometimes occur in the allopathic employment of *Tartar Emetic;* or from antimonial wine being accidentally swallowed. In consequence of the largest doses of *Antimony* being powerful

emetics, the poison in this form is generally rejected, and little harm follows; it is the chronic form of poisoning, in which the metal is continually taken in small doses, that is most to be feared; and this insidious plan has sometimes been adopted by slow poisoners, to produce symptoms analogous to those of internal visceral disease, so that, when they finally destroy their victims by arsenic or some other deadly means, less suspicion may arise. Suspicion should therefore be always entertained when a patient is, without evident cause, constantly sick on receiving his food or medicine through the instrumentality of one particular individual.

Symptoms.—From moderate doses, a strong metallic taste in the mouth; great heat and constriction of the throat, violent burning pains in the stomach, followed by violent vomiting, purging, and extreme depression of the circulation. The most marked symptoms from the full action of the poison are,—nausea, sickness, and great depression.

Treatment.—Large draughts of warm water, and tickling the throat to induce vomiting; at the same time a decoction of cinchona, oak-bark, tannin, or even strong tea, should be prepared and diligently administered, to decompose the poison. Magnesia dissolved in milk is a good remedy.

Chloride of Antimony. — Taylor relates four cases of poisoning by this substance (popularly called Butter of Antimony); three of the persons recovered. In the fatal case the whole of the inside of the alimentary canal was blackened as if it had been charred; two or three ounces had been taken, and death occurred in ten hours and a half.

Treatment.—*Magnesia* must be given, followed by the means recommended in poisoning by *Tartar Emetic*.

6.—Nitre—Nitrate of Potash (*Saltpetre*).

This drug, commonly employed for domestic purposes, has been administered by mistake for food, and has sometimes proved fatal in its effects.

Symptoms.—Burning pain at the epigastrium, vomiting, in-

creased flow of urine from irritation, or, in large doses, even inflammation of the kidneys; and great depression.

Treatment.—Emetics, and the stomach-pump, should be employed, and demulcent drinks given.

7.—Ammonia (*Hartshorn*).

Poisoning by "Hartshorn and oil" is by no means uncommon, especially among children.

Symptoms.—Intense sensation of burning in the throat, gullet, and stomach; when vomiting occurs the ejecta are mixed with blood of a dark-brown colour.

Treatment.—Vinegar, lemon-juice, or orange-juice should be promptly given, followed by demulcents.

If ammoniacal vapour has been accidentally inhaled, causing spasm of the glottis, Acetic or Hydrochloric Acid should be immediately inspired.

8.—Phosphorus (*Phosphorus*).

Vermin-poison is often a compound of *Phosphorus* and common grease, and may be taken accidentally or by design.

Carbon is said to absorb *Phosphorus*, so that taken in the form of pills it relieves those who have to manipulate the poison from the disastrous effects. The *fumes of Phosphorus* often cause, in lucifer-match makers, necrosis of bone, especially of the lower jaw. In these cases the poison acts through the blood, and not, as some have fancied, through a hollow tooth.

Symptoms.—*Phosphorus* is an irritant poison, speedily producing intense thirst, nausea, pain in the stomach, and vomiting; the matters ejected have a garlicky smell, and when thrown up in the dark are luminous. The pain spreads over the body, and, after much suffering, the person usually dies in a few days. On *post-mortem* examination, the liver is found in a state of fatty degeneration.

Treatment.—A speedy emetic, and directly afterwards Magnesia in linseed tea or other bland fluid, to neutralise the

phosphoric acid which is liable to form in the bowels; with poultices to the region of the stomach and liver. Neither for *Phosphorus* nor for *Cantharides* should oils be given, as both are soluble in oils; although, as a rule, olive oil is one of the blandest of fluids that can be taken in cases of irritation of the bowels, and is also slightly laxative.

9.—Acids (*Acida*).

The chief of the strong mineral acids are the *Sulphuric* (*oil of vitriol*), the *Nitric* (*aqua fortis*), and the *Hydro-chloric* or *Muriatic* (*spirit of salt*).

Symptoms.—When attempted to be swallowed, the strong acids are usually ejected spasmodically from the pharynx, just as boiling water is; but they may still be quickly fatal from asphyxia, caused by swelling of the larynx from effusion under the mucous membrane; or the patient may die, after weeks or months, from stricture of the upper part of the œsophagus. There are intense burning and pain in the mouth and œsophagus, which are at first white, but afterwards black and charred. If the acids reach the stomach they will produce horrible pain, vomiting of dark, altered blood, shreds of tough mucus, and fœtid eructations. They are corrosive poisons, decomposing the tissues, causing rapid, small pulse, and such great depression that the patient sinks and dies. They have, also, a remote specific poisonous effect if taken persistently in moderate doses; but with large doses the symptoms and fatal effect are consequent on local injury.

If *Nitric* acid have been taken, there will be yellowish stains on the lips; if *Sulphuric*, brownish, and the teeth will be blackened; and in any case there will be a white, shrivelled, and detached state of the epithelium of the mouth and fauces. Where the acid has fallen on the clothes, *brown* stains are produced by *Sulphuric* and *Nitric* acids, *bright red* by *Hydro-chloric* acid; on black cloth red stains are produced by all.

Treatment.—Slaked lime, chalk, or *Magnesia;* or in default of these, the plaster of the apartment may be scraped

down and made into thin creamy paste with water, milk, oil, white of egg, or any demulcent. Afterwards bland, mucilaginous, and oily fluids should be given, and a poultice applied externally.

10.—Oxalic Acid (*Acidum Oxalicum*).

This is a common rapid poison, often mistaken for Epsom salts and *Zinci Sulph.*; but it may be useful to know that the three are readily distinguishable by their taste—a crystal or two, or a drop or two of the solution, being placed on the tongue; for *Sulphate of Magnesia* is bitter, *Sulphate of Zinc* is styptic, and *Oxalic Acid* is sour and nauseous. It is used as a cleanser and bleacher, to remove ironmould, etc., and is far too readily sold in the shops to any purchaser. As a poison it is usually taken, like Epsom salts, in large doses—3ss or more, partially dissolved in water.

Symptoms.—Excessive irritation, burning pain, and, generally, violent vomiting, of dark-green matter and blood; feebleness or total failure of the pulse; cold, clammy skin; great anxiety, and occasionally convulsions, the patient dying sometimes in half-an-hour, and generally within seven or eight hours, suffering dreadfully all the time. It has also a remote specific poisonous effect.

Treatment.—Although a rapid and deadly poison, many persons recover on account of the largeness of the dose, which leads to a speedy and copious vomiting, so that much of it is ejected. The antidote, too, is well known, readily available, and effectual. It is *Carbonate of Lime* in any form in which it can be obtained—*creta preparata*, plaster scraped from the ceiling, or common whitening, mixed with a *small* quantity of water into a creamy paste. It should be observed that the limit to the quantity of water is important, and applies to nearly all poisons, for too much diluent drink tends to dissolve a poison, to spread it over the stomach, and to promote its absorption. In the absence of *Carbonate of Lime*, *Magnesia* might be used, but not the alkalies—Potash or Soda—which would only form *soluble* salts, that would enter the circulation and prove poisonous. After the antidote, bland

mucilaginous fluids may be given, and the abdomen covered with a poultice.

Salts of Sorrel, or *Essential Salt of Lemons*, is the acid oxalate of potash, used for bleaching straw and removing ink stains; it produces the symptoms of poisoning by *Oxalic Acid*, and must be treated in the same way.

11.—Carbolic Acid (*Acidum Carbolicum*).

Cases of accidental poisoning by the incautious use of this valuable therapeutic agent, are unfortunately of rather frequent occurrence. Used in the sick-room as a disinfectant, there is some danger of its being erroneously given to the patient. And elsewhere, even the handling of it in the form of powder may cause unpleasant effects. Moreover, when treating Abscesses, Wounds, and Fractures, it should be employed cautiously, for serious complications have arisen from its undue absorption by the system. As the *Acid* is absorbed more readily when combined with oil than in an aqueous solution, the latter is in some cases preferable when the *Acid* comes into direct contact with a large granulating surface. When introduced into the uterine cavity the solution has produced dangerous collapse. Whenever employed, the urine should be frequently examined; for as the *Acid* is eliminated by the kidneys, it acts as an irritant on those organs, and may cause real hyperæmia, or parenchymatous inflammation, of which abnormal urinary secretions would be symptomatic.

Symptoms.—Diagnosis is usually sufficiently easy; the whitening mucous membrane and the odour of the breath leave no room for doubt. Severe vomiting; skin becomes livid, or has a mottled appearance; extremities cold; stools are blackish-brown; urine is very dark brown, almost black, free from turbidity and without trace of carbolic acid, blood, or albumen; unconsciousness rapidly supervenes. When applied to the skin it loses its sensitiveness, and becomes white and puckered, as from immersion in hot water; then it

becomes dry, red, sore to the touch; burns, tingles, smarts; and finally cracks, forming deep sore fissures.

Treatment.—When *Carbolic Acid* has come in contact with the skin, disintegration of the cuticle may be averted by the application of a strong solution of *Carbonate of Soda;* the same remedy may be employed as a wash for the mouth if the *Acid* has been taken. If it has been swallowed, a stomach-pump should be employed, but it is often very difficult to pass the tube in these cases, for the acid constricts the œsophagus; a smaller tube than usual should therefore be used. Albumen, and a strong solution of the saccharine *Carbonate of Lime*, are also of great use. Any remedy employed should be applied as soon as possible. The following preparation is said to be an antidote: *Sugar of Lime*, made by dissolving sixteen parts of white sugar in forty parts of water, digesting with lime for three days, then filtering and evaporating.

12.—Oil of Tar (*Kreasote*).

This is seldom taken in poisonous doses. Mucilage, oil, etc., are antidotes to this powerful irritant. If great depression be one of the symptoms, *Ammonia*, or similar remedies, may be required.

13.—Colchicum (*Colchicum*).

Cases of poisoning by this medicine are most likely to arise from taking too large doses of the wine or other preparations of the drug, or from continued doses producing gradual intoxication.

Symptoms.—These much resemble those of tartarised Antimony, there being great nausea, sickness, purging, and depression of the heart's action. Both these drugs are used for insidious poisoning, because the symptoms closely resemble those of natural illness.[1] Antimony, might, however, be

[1] Slow poisoners are reported to have begun with Colchicum or Antimony, and then finished off their victims with Arsenic.

detected in the urine by Sulph. Hydrogen, which throws down an orange-coloured precipitate.

TREATMENT.—Same as for *Aconite*.

14.—Opium (*Opium*).

It is important to distinguish between Opium-poisoning and primary Apoplexy. The chief differences are tabulated as follows:—

DIFFERENCES.

OPIUM-POISONING.	(*Primary*) APOPLEXY.
1. Occurs chiefly in *young persons*, especially females, of violent passions.	1. Occurs mostly in persons *advanced in life*, generally of full habit.
2. If taken with a meal, as in beer, the symptoms would not arise for *half-an-hour*.	2. Is often the *immediate* consequence of over-repletion of the stomach.
3. The symptoms come on *gradually*.	3. The symptoms occur *suddenly*.
4. The patient can be *roused*, for a moment, but reflex movements cannot ordinarily be induced.	4. The patient *cannot be roused*, but reflex movements may usually be induced.
5. The face may be very *pale* and sunken or bloated. The eyes are closed and the *pupils* usually *contracted*, frequently to the size of a pin's point, and insensible to light, and are contracted equally. In the last stage, the pupils become widely dilated.	5. The face is turgid and *congested*. The pupils are rarely contracted equally.
6. The breathing is deep but *quiet*.	6. The breathing is *stertorous*.
7. Pulse small and of natural frequency.	7. Pulse slow, full, and labouring pulsation in the parotids can be seen If the patient be watched carefully any movements that occur will be observed on one side of body only; and when there are no movements, relaxation on one side can generally be easily recognised.
8. Is usually fatal between the seventh and twelfth hours.	8. Is usually fatal earlier or later than Opium-poisoning.

Morphia, the principal alkaloid of *Opium*, acts similarly. *Narcotine* is an excitant, increasing the frequency of the pulse and raising the temperature. *Thebaine* excites the upper portion of the cord, *Narceine* the lumbar portion of it.

Diagnosis is also to be made from *Intoxication*, which produces similar symptoms, but here the odour of spirit can generally be detected in the breath (this, however, may be caused by spirit having been given to rouse the patient); the pupils are not contracted; and when aroused, the patient talks incoherently before he relapses into sleep. Opium-poisoning may also be distinguished from the narcotism of *uræmic poisoning* induced by diseased kidneys, which causes puffiness of the eyelids, and albumen in the urine.

Opium-smoking and eating, when once the habit is formed, soon becomes an all-absorbing passion. The late Dr. Bayes said that when he resided on the borders of Lincolnshire, he saw a great deal of opium-eating and laudanum-drinking which is still carried on there. "The chemists in those districts sell immense quantities of *Opium*, in its crude state, every market-day, rolled into little sticks, in pennyworths and twopennyworths. I have seen fen-farmers who were in the habit of buying *Laudanum* by the half-pint or even more, on every visit to their market-town. The habit is first commenced to allay the feeling of extreme lowness of spirits and bodily depression which affects the ague-stricken where Intermittent fever is fully developed." A cachectic state of the body, the derangement of most of its functions, is generally noticed in those who habitually use the drug; "and in them the slightest scratch often degenerates into a foul and ill-conditioned Ulcer.

One of the most common uses of *Opium* is for the quieting of children: * for this purpose it is usually given as *Laudanum*, *Paregoric*, or soothing-syrup. Any mother, nurse, or baby-farmer, using these substances, ought to be treated as a criminal; if it were so, hundreds of children would be saved who are now more or less slowly poisoned, either by design, mistake, or over-dosing. *Laudanum* is sometimes prescribed by allopaths; but in their hands it is not unattended with danger, for it is on record that a fatal issue has followed the administration of one minim to a child seven days old, two

* The *American Journal of Pharmacy* states that 150,000 infants are killed every year by the Opium contained in the various kinds of soothing syrups given to them.

minims to one five days old, five minims to one nine months old. The nervous irritability, fretfulness, and sleeplessness for which these drugs are given, find in Homœopathy certain and harmless remedies.

Symptoms.—In addition to those stated in the table, the person lies quite still, with closed eyes, pupils generally contracted, occasionally dilated, in the last stage widely so, pale, ghastly countenance, free perspiration, increasing slowness of respiration, and insensible to external impressions; the whole expression being indicative of deep and perfect repose. The differences just tabulated are most marked in the beginning of a case of poisoning by *Opium*, for afterwards congestion of the brain and effusion come on, with even stertorous breathing, and the case then more resembles one of Apoplexy. If the patient recover, the stupor passes into a prolonged sleep—twenty-four to thirty-six hours—after which nausea, vomiting, giddiness, and loathing of food, take place.

Treatment.—The primary object is to remove the poison from the stomach, which is best accomplished by washing it out by the stomach-pump. This treatment is better adapted to *Opium* than to any other poison, because it is usually taken in the liquid state of *Laudanum*, which narcotises the nervous system, and renders it almost insensible to emetics. A gag should first be placed between the jaws, and the tongue pressed back to place the epiglottis over the larynx, and then a *flexible*, but not elastic, pipe, previously softened in warm water, and lubricated with butter, passed down. About a pint of warm water is to be pumped into the stomach, and then nearly as much withdrawn; this should be repeated till the water returns clear. If no stomach-pump be at hand, some india-rubber tubing may be employed as a syphon. In default of a stomach-pump or tubing, or where solid *Opium* has been taken, a *non-nauseant emetic* should be given, as *Zinci Sulph.* ʒss. A suitable emetic may be readily found in common mustard-flour, a dessert-spoonful of which may be given in cold water; for this, as well as *Sulphate of Zinc*, is a direct emetic, acting quickly, and without the preceding nausea that *Antimony* and *Ipecacuanha* usually produce. For children, however, the proper emetic would be tartarised Antimony, about gr.ss in a

little water, and sweetened with syrup. Where much nausea exists, sudden pressure on the epigastrium may induce vomiting. When the poison has been removed from the stomach (but not before), vegetable acids may be given to counteract the narcotism. Cream of tartar and water, vinegar and water, or lemon-juice, may be given every ten minutes. When there is inability to swallow, emetics may be given as enemata. *Belladonna* or *Atropine* has proved a successful antidote, given tentatively in as large doses as the patient can bear, and at frequent intervals, until the contracted pupil dilates; but administration must be guided by the amount of narcotism present. It is commonly used hypodermically in doses of one-thirtieth to one-fortieth of a grain. Dr. Johnston, of Shanghai, speaks in very high terms of the value of the sub-cutaneous injection of *Atropine*. *Strychnine* has also been remedial. The next object is to *keep the patient constantly roused*, by dashing water, cold, or alternately hot and cold, over the head and face, by keeping him walking in the open air between two strong persons; this both wards off stupor, and, by promoting respiration and circulation, expedites the elimination of the poison from the system. Flapping of the body and legs with a wet towel is rousing. Galvano-electricity is also very useful in this stage in keeping the patient awake, except when there is cerebral congestion. Considerable time must elapse before the patient is allowed to sleep, and then he should be wakened up as soon as he snores.

In desperate cases, *artificial respiration* (see Sec. 239) has properly been resorted to, and has in some instances averted a fatal issue. Often great perseverance, even for hours, is necessary, and should be observed even in hopeless cases. When the poison has been removed, a decoction of *coffee*, in oft-repeated doses, is useful to revive the patient, and to mitigate sickness and headache. Coffee is an excellent anti-narcotic, and helps to keep awake patients poisoned with *Opium*. Danger has not ceased when consciousness has been restored, as there is liability to relapse until reaction is fully established, and the circulation is nearly normal. Even then there is danger of consecutive Pneumonia.

15.—Alcohol (*Alcohol*).

It is important to be able to detect poisoning by large potations of *Alcohol* from poisoning by *Opium*, and from Apoplexy, as the immediate treatment differs in each case. (See Section on "Opium" for symptoms of Apoplexy.) The *odour of the breath*, the natural size of the pupils, the incoherent talk when roused, and the history and circumstances of an unconscious patient, may point to drunkenness as the cause; if these be absent, the presumption is that it is not a case of intoxication. It should always be remembered that a drunken person may have suffered an injury and sustained concussion of the brain; or a drunken debauch may coincide with the final break-up of the vessels within the cranium.

Symptoms. — Growing insensibility, tactile, mental, and moral; which may increase rapidly and result in coma; or may increase slowly, and then become suddenly absolute; face flushed, even bloated and livid; pupils dilated and inactive (in poisoning by *Opium*, the face is generally pale and the pupils contracted); mouth and nose secreting frothy mucus; pulse fluttering and rapid, breathing stertorous.

Treatment.—Narcotic poisoning from large doses of *Alcohol* or spirits-of-wine requires the prompt use of the stomach-pump, cold affusion over the face and head, and warmth to the cardiac region and the stomach; the circulation in the extremities should also be promoted. When exposure to cold and drunkenness have produced combined effects, those of cold should be first counteracted. If bad cases are neglected, they may prove fatal. Should the patient appear to be dying from Paralysis of the respiratory muscles, *artificial respiration* should be resorted to (see Sec. 239); if from closure of the larynx, catheterism or tracheotomy may be performed. In simple cases, flagellation with a wet towel will soon succeed in restoring the patient to consciousness.

One of the chief symptoms of poisoning by *Alcohol* is *Delirium Tremens*.

Delirium Tremens.—The physical action of *Alcohol*, whether taken in large, or in frequently-repeated small, doses, induces changes partly of a chemical and partly of a vital nature; the

general nutrition of the body suffers, and if the habit be long persisted in, an incurable cachexia results. The multiform evils which the use of *Alcohol* produces are so great that it may be truly stated, that if *Alcohol* had never been known, a vast amount of sin and crime, and a yet larger proportion of the poverty and misery now in the world, would never have existed. It may be observed that although the production of wine by fermentation is a natural phenomenon, due to the existence of sugar in the grape, yet the art of distillation, by which the ardent spirit is educed, is a purely human invention.

Symptoms of Delirium Tremens.—The disease may only appear after a long course of alcoholic stimulation, or it may be suddenly developed after a protracted debauch. The earliest symptom is one of great mental and physical depression. The patient fancies he is haunted by spectres, and is afraid to be alone. A state of excitement and delirium follows, in which he becomes the victim of various painful delusions, chiefly having reference to his business, which he thinks is irretrievably ruined, or to his friends, whom he believes to be plotting against him. Haunted by spectral illusions and imaginary horrors, he desires to get up, and often makes violent efforts to escape from foes and danger. Sleep almost wholly forsakes him; he becomes restless, trembles, and is frequently endeavouring to change his posture; he declares that rats, mice, beetles, etc., are about his bed, that strangers are in the room, or that listeners are at the door or concealed behind the curtains. The patient is, however, easily subdued, and induced to remain quiet for a time. His eyes are restless, and the conjunctivæ red and injected; the face is usually pale, but sometimes flushed and wild-looking; the skin is commonly moist or clammy; the pulse weak and compressible, the action of the heart is often violent, and the tongue foul, with entire loss of appetite. The natural tendency of the disorder is to terminate in a critical sleep, at the end of some fifty to seventy hours after the commencement of the delirium.

Pathological Cause.—The delirious affection is caused by the direct action of *Alcohol* upon the nervous system, and is

not the result of the sudden withdrawal of the accustomed stimulant. The experience derived from hospital practice, and from prison discipline, abundantly proves that a person who indulges very freely in stimulants may suddenly abandon them without any risk. Indeed, as with other poisons, the great danger to be feared arises from their continued employment.

"I dare say you are all impressed with the general belief that delirium tremens depends mainly on abstracting stimulants from a person largely addicted to them. I will not say that it never depends on that; but what is more certain is, that it is much more likely to ensue when a person who is largely addicted to the use of stimulants leaves off food. So long as a man keeps up both the eating and the drinking, he is in little risk of delirium tremens. Either when he suddenly leaves off eating and takes to drinking, or when he gradually diminishes his food and increases his drink, he is in the greatest danger of that disease. So that we come to this—which may seem paradoxical and immoral too,—that a man who both eats and drinks too much is in less danger than a man who commits only one of those excesses. The double fault is less mischievous than the single: the eating counteracts the harm that would ensue from the drinking. If we look about in society we may see this very plainly. There are still many persons habitually engaged in too great eating and drinking, doing both to excess; and they are in danger of breaking down in various defects of digestion and the consequent disturbances, but they are in no danger of delirium tremens. The people who are in that danger, and show the evil effects of drinking in the most marked form, are they who drink largely and eat little."—*Sir James Paget, F.R.S.*

Treatment.—The immediate cause of danger is exhaustion; hence the importance of supporting the strength by nutritious, digestible diet, in a fluid form,—beef-tea, soups, yolk-of-eggs, warm milk, cocoa, etc., in small quantities frequently repeated. "The stimulus of such a spice as *cayenne pepper*, given in soup, on the atonic stomach, will have a favourable influence on absorption." A cup of *coffee* is sometimes useful to still the nervous excitement. It is important, at the same time, to eliminate the poison from the system; and this is best effected by hot or cold baths, and especially by the wet pack (see Sec. 32). A tumbler of cold water given on entering the bath materially increases its efficacy. The action of the skin should also be promoted by friction. The patient should remain in a quiet, darkened room, and everything be done to induce sleep, and obviate mental irritation. Skilful nursing is of great importance. If nourishments are not administered,

and sleep does not succeed, the patient may sink from exhaustion.

The following remedies are useful at different stages of the disease according to the symptoms present:—*Bell.*, *Stram.*, *Hyos.*, *Opi.* 1x, *Nux V.* "*Stram.* in pure tincture, and 1x dilution, I have found successful in three very bad cases of Delirium Tremens" (*Dr. Dalzell*). "The most generally useful remedy in well-marked Delirium Tremens, is *Bell.* ϕ, gtt ij. every two hours. Sleep and a quiet night, with marked improvement next day, I have almost always found to ensue. In some cases, however, the patient is so obstreperous that he will not take regular doses of medicine, fancying that he is being poisoned. In such cases a full dose of *Chlor.-Hyd.*, grs. xxx—xl, may be given with advantage at bedtime" (*Dr. D. D. Brown*). "I have experimented with *Strychnia* and *Nux Vomica* as antidotes to the effects of alcohol and with invariable benefit" (*Dr. Moray*).

16.—Chloroform—Ether (*Chloroform, Ætherum*).

If during the inhalation of *Chloroform*, especially at the commencement, the vapour be not well diluted with atmospheric air, dangerous symptoms may arise, as syncope or apnœa, or both at the same time.

Treatment.—Promptitude is all-important. Immediate exposure of the patient to currents of *fresh air*, and *cold affusion*, the tongue being drawn forwards to open the windpipe. The head should be lowered, if the face be pale; raised, if turgid. The chest, cheeks, and extremities should be flapped with a wet towel, to stimulate the peripheral nerves. If not quickly successful, *artificial respiration* should be performed (see Sec. 239). If this be commenced while the pulse is perceptible it is nearly always successful; even if the heart be too feeble for its impulse to be felt in the pulse at the wrist, it is often sufficient to restore its failing energies. Galvanism sometimes succeeds in restoring respiration. The introduction of a piece of ice into the rectum is generally followed by a deep breath, and the gradual restoration of natural breathing. If

Chloroform have been swallowed, the stomach-pump is necessary; and afterwards Ammonia should be given, or ten minims of Liq. Ammoniæ, diluted with forty minims of water, may be injected into a vein of the arm, as is now done in Australia after bites from the most venomous serpents.

The treatment of *Ether* poisoning is the same.

17.—Hydrate of Chloral.

Many cases of fatal poisoning have been recorded. This fact need scarcely excite surprise when we remember the extensive adoption of this fashionable drug, and the large doses often taken.

The toxic effects upon the functions are in this order,—the cerebral, the voluntary muscular, the respiratory, the heart; and it is only when given in doses sufficiently large to induce a depressing effect upon the heart that any threatening or fatal result is to be feared.

Symptoms.—Faintness, gasping for breath, pulse rapid, weak, irregular in both force and rhythm; heart acts regularly, but with increased frequency and diminished force; jactitation of the limbs, intolerable sense of sinking and oppression at the pit of the stomach, confusion of thought. Later on, imperceptible pulse; suffocative dyspnœa; regular, feeble, intensely rapid heart; urgent thirst; utter prostration of muscular strength; extended limbs; low head; wandering mind.

Treatment. — *Strychnia* is likely to prove an antidote. Fresh air should be freely admitted into the room; the white of eggs given, with a moderate amount of alcoholic stimulant; warmth applied to the extremities and over the cardiac region.

18.—Deadly Nightshade—Belladonna (*Atropa Belladonna*).

The poisonous berries of this plant are often gathered and eaten by children, or even cooked in tarts; the root and

leaves are also poisonous. Cases have been reported in which the external use of *Bell.*, as in plasters or liniments, has produced the characteristic symptoms of poisoning.

SYMPTOMS. — Dilatation of the pupils, indistinct vision, flushed face, a wild form of delirium, Vertigo, Convulsions, an unsteady gait, an eruption on the skin resembling that of Scarlet Fever, and then constriction of the fauces and other symptoms follow. *Death* takes place by Coma. During the early symptoms, a cursory examination of such cases might suggest the idea of commencing Mania.

TREATMENT.—Same as for *Acon.* *Opi.* is believed to be a direct antidote to *Bell.* Doses, from three to five or more drops of the pure tincture, noting its effect on the dilated pupil. *Opi.* and *Bell.* produce antagonistic effects. Brandy and other stimulants are also recommended.

19.—Gelseminum (*Yellow Jessamine*).

All the cases of poisoning by this plant have occurred from over-doses in allopathic or botanic practice.

SYMPTOMS.—These are generally double vision, falling of the upper eyelids, dimness of sight, staggering gait, paralysis of some parts of the *muscular system*, blunted sensation in arms and hands, dilatation of the pupils, frothing at the mouth, relaxation of all the muscles, and feebleness of the heart's action with scarcely perceptible pulse preceding death.

TREATMENT. — The prompt application of the galvanic current speedily relieves. Mustard - and - water, Cayenne pepper, Ammonia, and brandy, are of great benefit. If the surface become cold, warm baths, frictions, and hot bricks to the feet are advisable. The danger is soon past under proper treatment.

20.—Prussic Acid (*Acidum Hydrocyanicum*).

One of the most rapidly fatal poisons known; in a large dose it acts almost immediately.

The volatile oil of bitter almonds, cherry-laurel water (*Aqua Laurocerasi*), and noyau contain Hydrocyanic Acid. They also contain the *Cyanide of Potassium*—a white salt used in photography, and a deadly poison, yielding *Hydroc. Acid* directly it touches water. For this, a solution of Sulphate of Iron has been found to be an efficient antidote.

Symptoms.—As it is a direct sedative, it produces almost immediate insensibility, with or without convulsions, and without marked effect on any special organ. The scream or shriek usually heard in animals directly its effects begin, have not been noticed in man. Death occurs by paralysis of the muscles of inspiration, the heart struggling to beat to the end, and by some condition of blood-poisoning due to an alteration in the physical or chemical state of the blood. It is a potent sedative to the brain and spinal cord, especially acting on the respiratory ganglion and tract; the former being in the *corpora olivaria* of the *medulla oblongata*,* and the latter extending thence through the upper part of the spinal marrow. The poison reaches these bodies through the circulation, little more than a quarter of a minute being sufficient to diffuse it over the whole body. It is also extremely volatile, and becoming instantly gaseous by the heat of the stomach, it immediately enters the blood by endosmosis.

On a *post-mortem* examination, the eyes have a remarkably bright life-like appearance, and on first opening the abdomen the odour of the acid, which resembles that of bitter almonds, may be perceived; the blood is fluid, as after most sudden deaths, and the mucous membrane of the stomach is found of a rosy appearance.

Treatment.—It is exceedingly rare for a person to recover from a really dangerous dose; and the smallest fatal dose is said to have been 40 minims; but if present when it is taken we should *immediately* perform *cold affusion* by dashing the

* A proof of the action of this acid being mainly on the medulla oblongata and pneumogastric nerve—the incident nerve of inspiration, supplying the stomach as well as the lungs—is its use in allaying Whooping-cough and other nervous coughs, too rapid breathing, and those palpitations of the heart or arteries which are symptomatic of indigestion. It is, however, no direct sedative to the heart, and would be useless, or have a mere evanescent action, in organic cardiac disease, or Aneurism.

coldest water that can be procured over the face and head, and pouring it from a height from a jug on the back of the head, neck, and spine; at the same time, *Ammonia*, in any form, should be administered; it acts physiologically, counteracting the sedative effect of the poison; and as the heart is not paralysed, if respiration can be restored, the patient may survive. When Ammonia is given by inhalation it should be with caution and intermission, lest returning respiration be impeded. *Artificial respiration* (see Sec. 239) should never be neglected, whatever other remedies are tried, until the cessation of cardiac pulsations. A chemical antidote is *Aqua Chlorini*, or the watery solution of Chlorine, which decomposes the acid by taking its hydrogen. In the absence of this, thirty or forty drops of *Chloride of Lime*, or of *Soda*, may be given in water. Chlorine gas may be inhaled. Another chemical antidote is, moist *Peroxide of Iron*. Emetics are of no use, in consequence of the volatility of the poison, which becomes a gas by the heat of the body directly it enters the stomach, and so instantly penetrates the blood. But artificial respiration should not be neglected.

21.—Monkshood—Aconite (*Aconitum*).

This poison may be taken accidentally, as when the root is dug up and eaten by mistake for horse-radish; it differs, however, by being a smaller root, sooner breaking up into fibres, and being externally of a brownish colour.

Symptoms.—The first effects usually come on within half an hour after taking the poison, and are—numbness and tingling in the lips, mouth, and fauces; tingling and loss of all proper sensation soon extend to the limbs and body generally, for *Aconite* and its alkaloid, *Aconitia*, are sedatives to the nerves of sensation; then constriction of the throat comes on, with difficult and hurried breathing, vomiting and purging, dimness of sight, dilated pupils, livid skin, and cold extremities.

Treatment.—In all cases of poisoning by *Aconite*, and most other vegetables, the stomach is to be first cleared out by an *emetic*, and then *castor oil* or other purgative given to clear the

intestines. Large quantities of powdered animal charcoal should be given in water. Subsequent treatment must be regulated by the symptoms, and may include *coffee* as an anti-narcotic, bland fluids, and poultices for abdominal irritation. According to Fothergill, in the advanced stage of *Aconite* poisoning, *Digitalis* restores the heart's action.

22.—Foxglove—Digitalis (*Digitalis*).

Poisoning is most likely to arise from too long persistence in the use of this drug, under allopathic medication.

Symptoms.—Faintings; irregular, intermitting, or slow and feeble pulse; nausea, headache, vomiting, etc.; great depression.

Treatment.—Similar to *Aconite*. If a large dose have been swallowed, an emetic should be speedily given, and in any case, the patient must be kept perfectly horizontal, and wine or brandy given him. Galvanism, carefully employed, is probably useful in bad cases. *Aconite* is an antidote.

23.—Tobacco.

Symptoms.—Fainting; choking; nausea; vomiting; Vertigo; fluttering, feeble pulse; cold, clammy skin; extreme depression of the vital powers; delirium; convulsions.

Treatment.—Strong coffee and brandy should be given; warmth and friction applied to the surface; and artificial respiration resorted to, if necessary.

24.—Nux Vomica—Strychnia (*Nux Vomica*).

Next to *Prussic Acid*, Strychnia is the most energetic of poisons, except, perhaps, that of some venomous reptiles, as the Cobra. The sixteenth part of a grain has killed a child, half a grain an adult.

Symptoms.—A condition of spasm resembling *Tetanus*, but more convulsive and paroxysmal, with distressing sufferings,

retention of mental faculties, livid face, opisthotonus, rigidity of the abdominal muscles, and death in from twenty minutes to two hours, from spasm of the diaphragm and other respiratory muscles.

Treatment.—If the patient be seen before the spasms set in, the stomach should be immediately cleared by an emetic. Large quantities of powdered charcoal suspended in water should be promptly given. Before the jaw is spasmodically closed, the tube of a stomach-pump should be introduced into the œsophagus, and a flexible catheter into the larynx, both being secured against compression by the teeth. The poison can thus be removed, antidotes given, and, if necessary, *artificial respiration* performed (see Sec. 239). This should be continued long and patiently. After the spasms have commenced, sedatives must be used—the inhalation of *Chloroform;* large doses of *Chlor.-Hyd.;* or *Tobacco* enema, or extract of *Indian Hemp*, or of *Calabar Bean*. *Powdered Charcoal*, it is said, will combine with the particles of the alkaloid *Strychnia*, and prevent its absorption. Subcutaneous injections of a solution of *Chlor.-Hyd.* have also proved curative. Cold may be applied to the spine by pounded ice in a bladder or an elastic tube. Dr. W. H. Burt records a case of poisoning by *Strychnine*, in which the spasms were most frightful, and the respiration nearly suspended, cured by *Ver.-Vir.*, the tetanic spasms being soon relaxed, and the patient well in three days. Nearly a teaspoonful was immediately given, afterwards two drops every ten minutes.

25.—Poisonous Fungi (*Fungi Venenati*).

Poisoning from these substances is not often difficult to detect: if the symptoms occur after a meal at which some suspicious substance, as *mushrooms*, has been eaten; and if several persons are attacked at the same time, after partaking of some common meal, the suspicion of poison scarcely needs further confirmation. Some fungi act as narcotics and rapidly; others as irritants and slowly. Poisonous fungi have an astringent, styptic taste, and a disagreeable, pungent odour.

Symptoms.—Chiefly those of bowel irritation,—colic, vomiting, and purging,—with great depression. The symptoms are sometimes felt within a few minutes after the fungi have been eaten, but in general not for several hours; the active principle apparently not being digested till it reaches the duodenum, so that it is absorbed by the bowels, and not by the stomach. Sometimes the symptoms are comatose, at other times choleraic.

Treatment.—If a patient be seen soon after the poison has been ingested, emetics are of great value; if not till the poison has passed the stomach, purgatives must be employed to expedite its removal from the system. Poultices, etc., may be applied to the abdomen.

26.—Spanish Fly (*Cantharis*).

Symptoms.—Poisonous doses of *Cantharides* produce burning in the throat, pain in the abdomen, vomiting of bloody mucus, strangury, bloody urine, priapism, sometimes aphrodisia, diminution or suppression of urine, and, finally, convulsions and death.

Treatment.—If vomiting have not already taken place, an emetic should be given, but *no oils*. To relieve the strangury left after the poison has been ejected or eliminated, oleaginous and demulcent injections into the bladder are useful; a warm bath is also a valuable auxiliary. Subsequently, the administration of *Camphor* will remove the urinary difficulties consequent on an over-dose of *Cantharides*.

27.—Carbonic Acid and other poisonous Gases.

Carbonic Acid Gas is a powerful narcotic poison, arising from various sources, as respiration, combustion, fermentation, the calcination of lime, etc. It is found in wells and cellars, and constitutes the choke-damp of coal mines. The fumes of burning charcoal owe their fatality to the presence of this gas, which charcoal gives off in greater quantities when newly

lighted or burning dimly. The fumes of ordinary gas employed in the heating of baths where there is no outlet for the escape of vapour; coal, coke, or gas vapour, are in any form injurious to life owing to the Carbonic Acid, Sulphuric Acid, and Sulphuretted and Carburetted Hydrogen Gases composing them. The latter, however, being irritants, their presence is quickly detected. Another dangerous vapour is that of a brick-kiln, which contains Carbonic Acid Gas, Ammonia, and Muriatic Acid Gas, the first predominating. Though it is unsafe to venture into an atmosphere which will not support a burning candle, the fact that a candle burns in any gaseous mixture does not prove that the air may be breathed with impunity.

Symptoms.—A sense of constriction and weight in the head; ringing in the ears; pungent sensation in the nose; somnolency; loss of muscular power, causing the person to fall; Dyspnœa, followed by Asphyxia; violent action of the heart, soon resulting in coma. The body remains warm, the limbs sometimes become rigid or convulsed, and the countenance, especially the eyelids and lips, assumes a livid appearance. These symptoms are sometimes inaugurated by a grateful sense of *delirium*, at others by acute sufferings.

Treatment.—The patient should be carried into the open air, however cold, laid upon his back with his head slightly raised, and his clothing removed; cold water should be suddenly thrown over the body, and hot water applied to the feet. Stimulants may be given internally or applied by friction, and aromatic vinegar or Ammonia by olfaction. A weak solution of Potash or Lime, applied by means of a handkerchief or a piece of flannel to the mouth and nostrils, allows the oxygen to enter the lungs. The face and body should be sponged with Eau-de-Cologne, brandy, or vinegar-and-water; and gentle electric shocks be given along the course of the nerves. But the great object is to restore breathing by *artificial respiration* (see Sec. 239). When the patient begins to recover, he should be taken to a warm bed, the windows of the room being thrown open. Condy's fluid should be freely exposed in the room. Stimulants may be taken sparingly, but cold acid beverages *ad libitum*.

PART VI.

Clinical Directory.

The Clinical Directory, as it has appeared in the Author's *Homœopathic Vade Mecum of Modern Medicine and Surgery*, has been so highly appreciated, and proved to be of such effective service, that it may be presumed to be a useful appendix to the *Text Book*. It has therefore been very carefully revised and enlarged. In its preparation we have to acknowledge the valuable aid of several homœopathic physicians in addition to those who previously contributed the results of their practical experience. Among those whose names we wish to record with gratitude, are:—Dr. D. D. Brown; Dr. J. Compton Burnett; Dr. A. C. Clifton, Northampton; the late Dr. Dalzell, Great Malvern; the late W. Freeman, Esq., Reading; Dr. Hale, Chicago; Dr. Hawkes, Liverpool; Dr. E. C. Holland, Bath; Dr. W. Johnson, Great Malvern; Dr. G. Lade, Glasgow; Dr. J. Maffey, Melbourne; J. H. Nankivell, Esq., York; Dr. Nankivell, Bournemouth; the late Dr. A. Stokes, Southport; Dr. G. Strong, Ross; Dr. H. Ussher, Wandsworth; Dr. J. Wilde, Weston-super-Mare; R. Wright, Esq., Nottingham. If any errors have crept in, we shall be glad to have them pointed out; and if any useful suggestions for future improvement can be made, we shall be thankful to receive them.

It will be at once obvious that a ready and successful use of this Clinical Directory necessitates a previous knowledge

of Materia Medica, as well as professional skill in diagnosing disease, and can only be of service *to refresh the memory*. Varied knowledge, observation, and tact, are essential in the art of prescribing, the perfection of which lies in the power of discrimination in individual cases, and of bringing into one focus the circumstances of descent, habits of life, tendencies to diseased action, idiosyncrasies, etc., that may complicate them. To the qualifications just mentioned must be added that of *long practice*. The Clinical Directory will, however, be found generally useful if consulted in connection with the preceding Materia Medica.

As a set-off to many shortcomings, we may state that the Clinical Directory is almost exclusively the result of the personal observation of the Author and other practitioners who have been associated with him in work; and, therefore, includes prescriptions that have been abundantly tested and confirmed by long and varied experiences.

A few abbreviations are used, the chief of which are the following:—*alt.*, for *alternately* or *in alternation with*; *int.*, for *internally* or *internal use*; *ext.*, for *externally* or *local use*; the letter F., with a number attached, refers to the Appendix of *Formulæ* which follows the Directory, as (F. 28).

A list of the medicines prescribed, with their names in full, their abbreviations, and the dilutions in most general use, as far as the Author's observations extend, follow the Appendix of *Formulæ*.

SUGGESTIONS FOR MARGINAL NOTES.

In preparing a future edition of this Directory the Author is desirous of securing the co-operation of other Medical Practitioners, whose aid, according to the results of their **personal experience**, is earnestly solicited. The Author wishes distinctly to state that he does not desire any additions to this Directory except such as have been well ascertained by the writer's own observations. The following are the chief points:—

1.—To **underline** all remedies prescribed in the Directory, the utility of which they have repeatedly verified; and to erase any recommended, but which have been found useless in practice.

2.—To insert **additional** well-tried remedies, stating one or two leading indications for them.

3.—**Brief cases** which strikingly illustrate the value of remedies prescribed will also be acceptable.

4.—The **dilution**—decimal (x), or centesimal (c), of the medicines prescribed.

5.—**Special accessory treatment**, considered necessary in any case, may also be briefly stated.

6.—The suggestion of diseases or symptoms not included in the present list, or other practical hints or general observations.

Lastly.—To those who are willing thus to co-operate with the Author, interleaved copies will be supplied, in which the notes should be legibly written, and marginal additions carefully connected with that portion of the text to which they are intended to belong.

The Clinical Directory.

Abdomen: Distended—Sil., Sulph., Ars. 3x trit. (*in scrofulous children*); Cin. (*from worms*); Iod., Phyto., Ferr.-Mur. m. ij. ter die, Calc., Ars.-Iod. 3x trit., Merc.-Iod. (*mesenteric*); Lyc. (*distended colon, from flatus, and flatulent distention of the bowels generally*). Dr. D. D. Brown reports a case in which the distended colon so pressed upon the liver as to cause pain in the right side and right shoulder. We had a similar case, and in both instances *Lyc.* gave rapid relief. Bapt. (*typhoid condition*); Dig., Tereb., Ars. (*Dropsy; see* **Ascites**); Coloc. *or* Nux V. (*tympanitis*); Dios. 1x (*flatulent distention*); Cimic. (*pains shooting across*); Chin., Carbo V. 1x trit., Iris., and Thuja. Dr. Ussher mentions a case of excessive distention in an elderly female relieved by *Bovis.* 3x and *Ign.* 3x.

Diet.—The aim should be to secure the greatest amount of nutrition from food of the least flatulent kind. Bread, solid vegetables, cucumbers, fruit, soup, rich sauces, and salted, seasoned, or twice-cooked meat, should be avoided; while biscuits, lemon-juice, and tender, but perfectly fresh meat, fish, fowl, or game, would be suitable.

Pain in—*see* **Bowels.**

Abscess: Threatened—Bell. (*pain and throbbing*); Apis. (*swelling, without redness*); Merc. Sol. should the foregoing fail to check the inflammatory action.

Acute—Acon. *or* Bell. alt. Hep.; Arn. (*early stage, and from an injury*); Merc.-S. Also Tomato or other poultices, on which *Hep.-S.* 3x trit. is sprinkled.

Chronic.—Sil. alt. China ϕ (in 3 to 5 drop doses), Phos., Bary.-C. 3x, Sulph., Hep.-S., Calc.-C., Ac.-Fluor., Ac-Phos., Sil., Mez., *or* Aur. (*from diseased bone*); Calendula lotion.

Of Liver—*see* **Liver.**

Mammary—*see* **Breast.**

Scrofulous—Calc.-Iod., Calc.-C., Sil., Sulph., Aur. 3x, Ars.-Iod., Ac.-Carbol.

Accidents: The first object should be to ascertain, regardless of proffered remarks from persons on the scene of the accident, whether life be extinct or not. If the sufferer be alive, after examining into the nature and extent of his injuries, the surgeon should give suitable directions, and see that they are carried out promptly and perseveringly. In a fatal case, it behoves him to note carefully the state, position, etc., of the body, and of surrounding objects.

Acidity (*Heartburn*); Nux V., Bry., Puls., Iris, Ver.-Alb., Carbo V. Ac.-Sulph., Arg. Nit.; Lyc. (*in elderly persons*); Phos. 3x (*during pregnancy*); Calc.-C. *or* Rob. (*chronic acidity*). (*See* F. 59.) Vals water, half a tumbler early in the morning and at mid-day, particularly if the tongue is very *red*, and the skin prone to inflammatory Acne.

See also **Dyspepsia.**

Acne (*Pimples*): Hard—Bell. (*in the plethoric*); Carb. V. (*recent in young persons*); Bellis (*from cold drinks*); Bary.-Carb. *or* Calc.-C. (*maggot pimples*); K.-Brom., K.-Hyd., Juglans, Ars., Dros., Calc.-C., Sep. 3x trit., Rumex ϕ int., and Rumex and Sulph. ointment ext. (F. 54); Bor., Petrol., Sulph., int. and ext. (*Sulph.* sometimes aggravates.)

Rosacea—Ant.-C., Rhus Rad., Ars., Apis, Carbo An.; Agar. int. and ext., Nux V. *or* Opi. (*if from spirit drinking*); Rhus 3x, Merc. 3x (*young persons*); Bell., Ars. (*severe and chronic cases*); locally Hypochloride of Sulph. *See* F. 56.

Strophulosa (*white gum-rash*)—Ant.-C., Puls., Hep.-S., Calc.-C.

Vulgaris—Sarza ϕ (*especially at the time of puberty*).

After-pains: *see* **Labour.**

Agalactia (*lack of milk*): Urtica Urens 1x. Dr. Clifton informed us of two cases complicated with uterine hæmorrhage, three weeks after labour, in which *Urtica Urens* effected a cure. Ext. Ricinus Communis has been recommended.

Ague: China *or* Sulph.-Quin. 1x trit.; Ars. (*chronic and undefined cases*); Ced., Berb.-Vulg. ϕ, Nat.-Mur., Carbo V.; Ipec. (*much gastric disturbance, with nausea*); Ign. (*much chill with frequent paroxysms*); Nux V., Ver.-Alb. *chill predominating*); Ars. alt. Ipec. (*dumb-ague*); Ver.-Alb. (*severe and obstinate cases*); Bry. (*chill stage*); Gels. (*hot stage*); Sulph.-Quin. or Ars. (*in the apyrexia*); Ac.-Phos. (*averts attacks when profuse sweating follows the hot stage*); Tereb. (*Dropsy following Ague*); Cit. of Iron and Quin. gr. j. thrice daily (*enlarged spleen following Ague*); Caps. (*chill aggravated by eating and drinking*); Eup. Perf. (*bone pains*); Eup. Purp. (*lips and nails blue, violent shaking*); Puls. (*in chlorotic girls*).

Masked.—Sulph.-Quin. The late Mr. Freeman reported about thirty cases in Cambridge and Cardiff in which Sulph.-Quin., gr. j. ad. aq. ʒ iv., ʒj. every 2 or 3 hours, effected a rapid cure. The symptoms were very variable, with tendency to periodicity, and had resisted indicated remedies.

Albuminuria: *see* **Bright's Disease.**

Alcohol: Effects of—Nux V., Bell., Caps. (large doses given in sugar water), Agar., Opi., Ars.; Dig., K.-Brom., Agar., Strych., *or* Sulph.-Quin. (*with tremors*); Ant.-Tart. (*gastric irritation*); Zinc., Ant.-Tart., Chloroform int.

See **Delirium Tremens** in Chap. on Poisons.

Alopecia (*loss of hair*): *see* **Hair.**

Amaurosis: Organic (*blindness with a sluggish or immovable pupil*)—Zinc., Merc.-Cor., Bell., Phos., Coni., Sant., Ferr.-Mur. (*from anæmia in the young*); Cann., Lith.-Carb., Solanum; Gels. (*desire for light*); Acon., Nux V., Hep.-S., Tabac., Plum.-Acet.

Amblyopia (*impaired vision from any cause except that of optical defect; incipient Amaurosis*); Ac.-Phos., Chin., Ferr., Ars., Anac., Sant., Phos. (*from debilitating causes*); Arn., Ruta, Nux V. 1x, Gels. 1x, Macrot. 1x trit. (*from over-use of the eyes*); Cimic.* (*aching in eyeballs*); Spig., Coloc. (*great pain in the eyes*); Bell. *or* Spig. (*congested appearance of the eyes*); Cact., Gels. (*hyperæmia of the optic nerve*); Lith. (*partial or threatened Hemiopia.* Warm fomentations at night relieve the discomfort in and about the eyes. The alternate use of hot and cold water (four times) changing every minute, morning and night, often affords the greatest relief. Further, a nourishing diet and sufficient rest and sleep should also be prescribed. Eye douche, cold, one to three minutes. The eye should be held over a small rising jet of water; forehead and temples should also be bathed in the same way.

See also **Sight**, *and* **Eyes.**

* The late Mr. Freeman said the powers of *Cimic.* to remove *aching of the eye-balls* is very marked, and is often the key to its use in Rheumatism, Neuralgia, and various uterine troubles.

Amenorrhœa (*delayed, suppressed, or deficient menstruation*: *see* **Menstruation.**

Anæmia: Ferr.-Red., Ferr.-Pyro-Phos. Tincture Ferri-Perchl., Nat.-Mur. 3x (when Iron fails, or as a preparation), Nat.-Sulph., Chin. (*from hæmorrhage*); Helon. 1x, Ac.-Phos., Ars., Iod., Merc., Macrot. Ferr.-Pyro-Phos. is regarded by some practitioners as the *best chalybeate*. Parrish's Chemical Food. Puls. 3x morning and night, and Fer.-Red. immediately after two meals. (*Anæmia with Amenorrhœa*). Plumb.-Acet., Petrol., Calc.-C., Ac.-Picr., Sil., Arg.-Nit. Cold sponging: but this needs great caution, or it may lower the tone by minute degrees at each application, amounting to a great deal in the course of time (*advice from Dr. Toynbee to the late Mr. Freeman*).

Anasarca: *see* **Dropsy**: General.

Aneurism: K.-Hyd. in large doses, Calc.-Phos., Iod., Lyc.; Acon., *or* Ver.-Vir. (*for arterial excitement*); Dig. ϕ (*as a palliative*); Bary.-C., Ars.-Iod. For recent Aneurism, constantly recumbent posture. Surgical treatment is often necessary.

Anger: Effects of—Acon. (*palpitation and arterial excitement*); Cham. (*bilious derangement*); Bry. (*headache*); Bell *or* Hyos. (*brain disturbance*); Nux V., Croc., Staph.

Mr. Nankivell, of York, has communicated to us a case of partial Paralysis of the tongue, with thick speech and slow utterance, the effect of anger, rapidly cured by *Acon.*

Angina: *see* **Throat, Croup,** *etc.*

Angina Pectoris: Ars., Cact., Dig., Ver.-Vir., Ver.-Alb., Hep.-S., Iod., Strych., Naja, Chin., Puls. ϕ, Ars.-Iod., Carb. V., Aur.

Paroxysm of—Dig. (*very slow, labouring pulse*); Chlor.-Hydrate, grs. x. to xx., Chloric Ether, Ac.-Hydroc.; Glon. (*pale face*); Acon., Cimic., Spig,, Nitrite of Amyl, inhalation of 3 to 5 drops. Ether Chlor. and Sp. common Arom. in equal proportions, a teaspoonful. Brandy should not be forgotten.

Ankles: Sprained: *see* **Sprains.**

Swollen—Apis, Ars., Puls., Ham., Ferr., Chin. Also Rest in the horizontal posture.

Weak—Calc.-Phos. 3x trit. almost specific; Calc.-Iod., Calc.-C., Phos., Sulph., Silicate of Lime, Thuja, Carbo Veg. Symphytum in decoction to bathe ankles, or as lotion.

Antigalactics (*medicines for diminishing the secretion of milk*): Calc.-C., Bry., Bell., Phos., Puls., Phyto. ϕ.

Anus: Constricted—Nux V. (*spasmodic closure of the sphincter ani*); Plumb., Bell., Graph., Æscul. Dilatation may be necessary.

Fissured and Sore—Æscul., Ac.-Nit., K.-Hyd. 1x. Glycerole of Hydras., Ac.-Tann., *or* Calend., locally (F. 6 or 11).

Fistula of—Silic., Caust. 3, Calc.-Hypophos. 1x, Graph. 3x and 12, Sulph. 3 and 12, Calc.-C., Ac.-Nit., Æscul. H., Ratanhia, K.-Carb.; Ham. with Glyc. (F. 5) ext.; Injection of Ham. *or* Hydras. lotion (F. 41) (*associated with Piles*); Merc.-Precip.-Rub. 3x, and Glycerole of Starch medicated with same (F. 3).

Itching of—Sulph., Ac.-Nit., Ign., Thuja, Ars., Ambra Alumina, Ant. Crud. A bad case from Ascarides permanently cured by Ign. 3x. Also for ext. use, to be applied three or four times daily (F. 1, 10, 39, or 48). Itching of anus is sometimes caused by crablice, especially in foreign seamen, when the following external application is effectual: ℞. Sem. Staph. ʒj.; Glyc. or oil ʒss; Digest. A strong infusion of Quassia is also recommended.

Itching of, from Worms—Cin., Ign. 6, Teut. *See also* **Worms.**

Pain in—Æscul.

Prolapsed—Podoph. (*at each stool with squirting Diarrhœa*); Ruta *or* Nux V. (*with Constipation*); Graph. (*with Constipation and Piles*); Aloes (*with Piles and great irritation*); Ars. (*with burning pain*); Ign., Podoph., Ac.-Fluor. 6, Gamboge, Lyc. (*in children*); Æscul. 2x (*after labour*);

Merc., Ac.-Nit., Ferr.-Phos., Ac.-Mur., Ham. extract with Glyc. and water (F. 5) as an injection, *or* Phyto. 1x int. and Phyto. ϕ ʒj. and Glyc. of Starch (F. 2). Dr. H. Wheeler uses an injection of Ferr.-Mur. ʒj. and aquæ ʒviij.

Anxiety, Care, Grief, etc.: Effects of —Ign., Ac.-Phos., Anac., Chin., Acon., Gels., Nux V.

Aphasia: *see* **Aphonia.**

Aphonia: Caust., Glon. 3, K.-Hyd. (*syphilitic*); Phyto. (*complete or partial loss of voice*); Acon., Bell., Merc., Brom., Am.-Brom. in crystals, *or* Carbo V. (*catarrhal*); Ant.-T. (*from cold, with bronchial râles*); Ign. *or* Nux V. (*nervous and hysterical*); Spong. 2x *or* Iod. 2x (*with dry laryngeal cough, and feeling of soreness when coughing*); Gels., also inhalations of *Iod.*, and a wet compress at night. Galvanism of the tongue.

Chronic—Phos., Carbo V., K.-Bich., Hep.-S. (*wheezing*). Iod., Spong. Inhalations of Iod. or Chlorine.

From Over-use of the Voice—Caust. (*high voice*), K.-Bich. (*tenor*), Phos. (*bass*), Arn., Bary.-Carb., Ac.-Oxal.

Worn-out—Rest, Galvanism, or magnetic pad to the throat.

Aphthæ: Merc., Bor., K.-Chlor. The late Mr. Freeman recommended the sucking of a crystal of K.-Chlor. occasionally, or the use of a mouth-wash containing ʒi. to Oj. of water. Ant.-T. (*with vomiting of milk after nursing*); Ars. (*ulcerous*); Ac.-Sulphˢ. 1x (*ulcerous in adults*); Borax, Hydras., Ac.-Carbol. 1x, *or* Sanguinaria, one part of any, to about twelve to fifteen parts of water, as a wash; *or* (F. 4); Sulphurous Acid Spray; *or* (F. 7) (*ulcerous Aphthæ*). Dr. Burnett prefers a wash of K.-Permang.

Apoplexy: Early Symptoms—Acon. alt. Bell. every hour, and fomentations to the head of hot water * every two hours; Glon. (*throbbing headache in temples and full sensation*), Amyl.-Nit., Acon., Nux. V., Bell., Gels.

Fit of—Acon. (*full, quick, strong pulse*); Bell. (*great redness of the face, and convulsive movements*); Opi. (*bloated, dusky-red face, stupor, and stertor*); Phos., Cocc., Rhus., Lyc., *or* Arn. (*after-effects*).

Preventives—Nux V., Acon., Phos., Merc.; *also*, Avoidance of stimulating food and drink (especially beer), over-eating, excitement, haste, exposure to the hot sun, heated rooms, etc.

Ophthalmoscopic examination of the nervous tissues of the eyes is serviceable in diagnosis.

Appetite: Depraved—Ars., Chin., Calc., Ferr., Chin.-Sulph., Nux V., Ac.-Nit.

Excessive—Cina (*from worms*); Chin. *or* Ac.-Phos. (*after illness*); Merc., Sil., Calc., Gels., Ign. Hep.-S., Carb. V. Patients with excessive appetite should eat slowly.

Lost or Deficient—Chin., Ferr., Macrot. 1x trit., Ac.-Phos., Still. 1x trit., Nux V. 1x, Ars., Merc., Puls., Nit.-Uran., Calc.-Carb., Ign., Rhus T., Pru. S. The *cause* should be removed.

Variable—Cin., Chin., Iod., Calc.-C.

Arteries: Disease of—Phos., Lyc.

Arthritis: *see* **Gout.**

Articular Rheumatism: *see* **Rheumatism.**

Ascarides: *see* **Worms.**

Ascites: Apoc., Digitaline 1x with caution, Apis, Ars., Eup.-Pur. as an infusion; infusion of Dig. in ʒss doses; Nux V., China, Lyc. Crot.-Tig. is the most reliable remedy in Ascites from Cirrhosis of the liver. Dr. Clifton reports two cases from Cirrhosis, in which the extract of *Apoc.* removed the Ascites. The concentrated tincture is the most reliable form of Dropsy of cardiac origin. Several contributors prefer the fluid extract to any other form of the remedy.

* *Cold* applications to the head have been recommended in the body of the work; but several co-workers in this portion have recommended *hot*. See also *Encephalitis*.

Asiatic Cholera: *see* **Cholera**: ASIATIC.

Asthenopia (*weak-sightedness from muscular fatigue; temporary Asthenopia may occur after severe fevers or other exhausting diseases*): Strych.-Nit. $\frac{1}{200}$. The use of proper concave glasses. Good air and food, cold water douche, frequent rest of the eyes, and one or more of the remedies prescribed under **Amblyopia**, if from exhausting causes. In the latter case see note on cold sponging under **Anæmia**.

Asthma: Ipec., Ars., Gels., Plumb., Cact., Lob., Cup.-Acet., Kali C., Aur., Nux V. alt. Carbo Veg. (*with dyspepsia, flatulence, etc.*).

PAROXYSM OF—Acon. (*arterial excitement; and when arising from cold*); Ver.-Vir. (*laboured breathing, with cold sweat on the face*); Ipec. ϕ, gtt. j. every half-hour (*spasmodic, with retching*); Chlor. Hyd., Bell. (*nightly spasm*); Cup.-Acet., Ac.-Hydroc., Liq. Sod.-Chlor., Lob. in large doses. Also inhalation of chloroform or oxygen. Nux V. *or* Ars. (*between the attacks*).

CHRONIC—Ars., Sulph., Plumb., Nux V., K.-Hyd.

CHILDREN'S—Samb. (*profuse perspiration*); Ipec. (*retching or sickness*); Ant.-T., Ars. Samb. and Ant.-T., in most cases, are the best remedies.

Atrophy: GENERAL—Ars., Zinc., Iod., Calc.-C., Sil. 3x, Phos., Sulph.; Nat.-Mur., Plumb.-Acet., Bary.-Carb., Calc.-Acet., Calc.-C. (*scrofulous wasting*). Cod-liver oil. Also frictions, and exercise alternated with perfect rest. Inunction of Ol. Oliv. is recommended.

Axillæ (*Armpits*): OFFENSIVE PERSPIRATION OF—Petrol., Kali C., Ac.-Nit., Lyc.

Back: ACHING OF—Arn. (*from over-exertion*); Rhus, Bry., Nux V., Gels., Ham., Sec., Kali C., Ac.-Oxal., Cimi. (*from uterine causes*);

PAIN IN—Cimic (*crick-in-the-back*); Apoc., Ant.-T., Acon., Canth., *or* Tereb. (*from the kidneys*), Ham., Eup.-Purp., Acon., Nux V., *or* Æscul. (*from Piles*); Tereb.-Venet. Dr. Ussher says Tereb.-Venet., made into pills, acts well for pain in the kidneys.

See also **Lumbago** *and* **Menstruation**: PAINFUL.

WEAKNESS OF—Sil., Rhus., Phos., Ign., Calc.-Phos., Chin. (*from nervous exhaustion*). Many forms of pain and weakness of the back are much helped by wearing a belt, but it must not be heating. A compress is often of use, or a local packing.

Baker's Itch: *see* **Lichen**.

Balanitis (*Inflammation of the glans and lining of the prepuce, with muco-purulent discharge*): Merc.-Cor. 3x, Thuja; Calend. ext. Cleanliness, with tepid water.

Baldness: *see* **Hair**: FALLING OFF OF.

Barber's Itch: *see* **Beard**: ACNE OF.

Beard: ACNE OF—Lyc., Graph. 2x trit. Merc.-S. 3x trit., Ant.-T., Hep.-S., Calc.-C., Merc.-Iod., *or* Sulph. int. and as an ointment or lotion (F. 34, 43, 54). *Sulphurous Acid spray*, locally, once (or for a *time*, twice) a day, has been used successfully; also ointment of dilute Acid Nitrate of Mercury.

Bed-sores: Glycerine-cream, *or* Calend.-lotion; Calend.- *or* Arn.-plaster for protection. Unguentum Zinci (B. P.), Coal Tar Saponicé. Dr. J. H. Clarke advises the application of Hypericum Oil (Hyperic. ϕ ʒi, Olive Oil ʒi). In tedious cases, a water or air bed if possible. "Air-dried linen," *i.e.*, linen that has neither been ironed nor mangled, tends to obviate bed-sores. This is due, no doubt, to the softness of the unpressed fibres. Miss Nightingale's liniment for bed-sores is, one part Laudanum, two parts brandy, three parts Olive Oil: this she very highly recommends.

PREVENTION OF—Frequent washing the parts exposed to pressure with soap-and-water: and, after drying with a soft towel, a little Glycerine or Glycerine of Starch (F. 2) should be gently rubbed over the

parts. If redness of the skin appear, the parts should be moistened with brandy or some other proof spirit, to harden the skin. Spirit of proof strength is better than the usual prescription of brandy and water.

Belching: *see* **Eructations.**

Bilious-Fever: *see* **Remittent-Fever.**

Biliousness: Leptand. 1x trit., Nux V., Æscul., Merc., Bry., Podoph., Hep.-S., Ipec., Iris, Ferr.-Met., Kali C., Sulph., Nat. Sulph., Lyc., Magnes.-Mur., Leptand. alt. Podoph.

Attack of—Bry. *or* Puls. (*from indigestible food; vomiting of bile and mucus*); Acon. (*from cold or excitement*); Cham. (*in females, and from worry or passion*); Ver.-Alb., Iris ("*sick head-ache*," *with vomiting or diarrhœa*); Nux V. (*from stimulants, over-feeding, etc., with constipation*). A teaspoonful of mustard in a tumbler of hot water, or drink freely of hot water and vomit the bile; after that *Nux* 1x. In chronic cases *Sulph.* 3 at bedtime assists the action of *Nux* by day.

See also **Liver, Constipation, Diarrhœa,** etc.

Bites of Insects, etc.: **Stings.**

Black-Eye: Tinct. Arn. 1x int. and ext. (*if the lotion can be applied immediately*); Ham. (*broken skin, and if dicoloration has taken place*).

Bladder: Atony of—Nux V. ϕ, with electricity; but the possibility of pregnancy should be considered; Sec. ϕ, gtt. V. ter in die (*diurnal incontinence from atony in the sphincter vesicæ*); K.-Hyd. (*with enlarged prostate*).

Catarrhal Inflammation of—Acon. alt. Canth. (*from cold*); Dulc., Uva Ursi 1x, also decoction ʒj. 4tis horis (*from damp*); Cann., Canth., Apis, K.-Hyd., Chim. (*with much mucous or albuminous discharge*); Eup.-Pur. 2x, Amm.-Mur., Ant.-C., Copa. 1x, Puls., Tereb., Zinc., Pereira., Ac. Benz., Eryng.-Aquat., Sulph. Triticum Repens, decoction of, drunk freely.

Irritability of—Ferr. (*diurnal*); Bell., Canth., *or* Sulph. (*nocturnal*); Nux V. (*with spasm, and in gouty persons*); Buchu. infus. Uva Ursi, powder of, or infus. Podoph.; Lyc. (*with gravel*); Ac.-Benz. (*strongly scented, high-coloured urine*); Apis, Berb., Tereb., Copai., Senega, Caust. For irritability with pain at neck of bladder, a full bath, 85° for ten minutes, followed or not by a douche of two pails of cold water.

Paralysis of—Cann., Bell., Opi., Canth., Secale, Bary.-Carb., Acon., Nux V. Galvanism.

See also **Calculus, Hæmorrhage Strangury, Urine,** etc.

Bleeding: *see* **Hæmorrhage.**

Blindness: *see* **Amaurosis, Amblyopia, Sight,** etc.

Blister: *see* **Burns and Scalds.**

Blood: Spitting of—*see* **Hæmoptysis.**

Vomiting of—*see* **Hæmatemesis.**

Bloody Flux: *see* **Dysentery.**

Blotches: Ant.-C., Graph., Lyc., Clem., Ars., Apis.

Boil, Delhi *or* **Scinde**: *see* **Pustule Malignant.**

Boils: Bell. *or* Arn. alt. Acon. (*when forming*); Sulph. alt. Bell.; and hot poultices; paint with equal parts of Succus, Bell., and Glyc., or with Ver.-Vir. ϕ (*when formed*); Sil., Hep. (*when suppuration has occurred, but is torpid*); Muriate of Calc. lotion (F. 38) (*when very painful*). Early application of this lotion will frequently prevent boils from forming. When boils come in crops, *Bell.* should be used as a lotion as well as internally. Carrot poultice: sovereign remedy (*Dr. Stokes*).

Tendency to—Sulph., Hep.-S., Phyto, K.-Brom., Hydras., Chin., Sulph.

Bone: Contusion of—Ruta 3x and Ruta lotion ext.

Exostosis—Aur.-Mur. 3x and 6, Merc.-Iod., Sil., Kali Bich., Plumb.-Acet.

Inflammation and Caries or Ulceration of—Asaf. 12, Merc., Mez., Aur., Arg.-Met., Ac.-Fluor., Sil., Ac.-Phos.; *also* Phyto. and (F. 9).

Necrosis — Merc.-Prot.-Iod., Ars.-Iod., Sil., Ac.-Fluor., Symph., Phos., Ars., Asaf., Silicate of Lime, 1x trit.

Nodes—Sil., K.-Hyd., K.-Bich. (*cranial*); Merc.-Cor. 6x (*tibial*); Staph., Rhus (*soft nodes*); Aur.-Mur. (*hard nodes*); Nux V.

Pain in—Aur., Asaf., Merc., Ruta, Ac.-Nit., Ac.-Fluor., Ac.-Phos., Mez.-Aur., Mur., Rhod., Staph., Phyto.; Eup.-Pur. (*Influenza, bone-pains*).

Periostitis—Sil., Aur.-Mur., Mez., K.-Hyd., Merc.-S., Phyto., Phos.

Softening of—Calc.-C., Sil., Ac.-Phos., Calc.-Phos., Phos., Merc., Sulph.

Bowels: *see* **Constipation, Diarrhœa, Hernia, Anus, Enteritis,** etc.

Consumption of—*see* **Tabes Mesenterica.**

Pain in—Camph. (*severe, with chilliness*); Dios. (*with flatulence*); Acon. (*feverishness or excitement*); Bell. 1x, Coloc. 2x.

See also **Colic.**

Brain: Concussion of—Arn. alt. Acon. *or* Bell., Cicuta Vir.

Congestion of—Bell. 3x, or Atropiæ Sulph. 3x. Bell. should be given first, then if necessary Atrop.-S. If these fail, Apis, Opi., Gels. (*cerebral depression*) *or* Glon. (*cerebral exaltation*); Ver.-Vir. (*children with gastric irritation*); Acon., Gels., Nux V., Bry.; Sulph.-Quin. (*intermittent*); Cup.-Acet., Ferr.-Pyrophos., Cact. In congestion from tubercular disease, or from teething, with convulsions, speedy relief may be obtained by applying to the head flannels wrung out of *hot* water. The fomentations should be continued for half-an-hour or more according to the severity of the case, and most frequently the child falls into a quiet sleep during the process.

Dropsy of—Helleb., Dig., Merc., Bell., Bry., Calc.-C., Sulph., Ferr.-Iod., Arn. 1x, Apis, Apoc., Sil., Zinc. Dr. Burnett reports frequent success from the persistent use of Glon. 3 and Iod. 1.

Inflammation of—Acon. alt. Bell., Bry.; Stram. (*from tubercular deposit, with convulsions*); Ver.-Vir., Gels., Sulph. In cerebral Congestion, with much *mental excitement*, flushed face, etc., great and speedy relief may frequently be given by *packing* the legs (from the loins to the feet inclusive) in large towels wrung tightly out of mustard ("mustard bran") and hot water for twenty to thirty minutes, the bowels well covered with blankets. Plenty of mustard should be used, and, after the pack, the parts should be quickly wiped down with tepid damp towels (*Dr. Dalzell*). Hot fomentations to the head, as just recommended for Congestion, are also applicable for inflammation, and may supersede the somewhat harsh mustard-pack.

Softening of — Merc. alt. Bell.; Bary-Carb., Ac.-Phos., Nux V., Zinc., Ars., Phos., Zinc.-Phos. 1x; Hypericum (*pain and other nerve symptoms*).

Brain-fag: Nux V. ϕ, Ac.-Phos., Ac.-Pic., Calc.-Phos., Æthus. C., Gels., Glon., Strych.-Phos. $\frac{1}{200}$, Calc.-C., Sil., Anac., Staph., Zinc., Asar.-Europ., Iris.

Brain-Fever: *see* **Typhus-Fever**; *or* **Brain**: Inflammation of.

Branny-Tetter: Ars., Graph., Lyc., Sulph.

Breast: Abscess of—Bry. Silicate of Lime (*for earliest symptoms*); Bell. (*shining red and swollen*) alt. Phos. int., and Phos. ϕ gtt. v. to gill of hot water ext. (*during formation*); Phyto. 1x int. and (F. 9), and spongio-piline over the breast, if Bry. and Phos. fail; Sil. *or* Hep.-S. (*for torpidity, imperfect suppuration*).

Contusion of—Coni.

Excoriation of—Sulph.; Hydras. *or* Calend. ext. Arnica Lotion, Glycerole of Starch (F. 2) and of Phyto. (F. 9) are also recommended.

Inflammation, Hardness, Painfulness, or Swelling of—Bry.; Bell. (*shining red swelling*); Ver.-Vir. 6 int. 1x ext. When the breast is hard and hot, the skin intense and shining, and the veins blue and hard, the gland should be sponged with Sp. V. R. 60° o.p. until the part is quite cold; as soon as heat begins to return the process should be repeated. After a few spongings the pain and heat abate, the veins are emptied, and the breast is softened. *Phyto.* liberally applied helps greatly (*Dr. Stokes*). A basin lined with flannel, saturated with hot water, applied over the breast, is the best means of preventing suppuration, and relieving pain, that I am acquainted with. It is an effectual preventive of "broken breasts," and, by adopting it, I have never met with a case in my practice (*Dr. Holland*).

Tumours of—Calc.-Phos., Cundurango, Coni., Ferr., Galium, Hydras., Lappa Major.

Breast-Pang: *see* **Angina Pectoris.**

Breath: Fœtid — Merc., Carbo V., Chin.-Sulph., Ant.-C., Aur., Ac.-Nit., Acon., Ac.-Carbol., K.-Chlor., gr. x. ter die. Puls. 1x (*in growing girls*); Nux Mosch., Petrol., Arn.

Breathing: Short or Difficult—Acon., Ac.-Hydroc.; Ars. (*tightness and debility*); Ipec. (*wheezing, [dry] and with nausea*); Ant.-T. (*rattling [moist]*); Iod. (*emaciation*); Ferr. (*anæmia*); Hep.-S., Cup., Scilla., Spong. Friction over the chest with cod-liver oil, or with Glycerine, often relieves difficult breathing.

See also **Croup** *and* **Asthma.**

Bright's Disease: Ars., Phos., Canth. (*casts from fatty degeneration*); Merc., Phyto., Kreas., Nux V., Ac.-Phos., Tereb., Apis, Merc.-C., Ferr.-Met., Ferr.-Phos., Plumb. Hot-air baths. Many striking cases of cure have been recorded from an exclusive diet of skim-milk, six to eight pints daily, not boiled, no medicine whatever having been prescribed.

See also **Kidneys**: Inflammation of, *and* **Nephritis.**

Bronchial Catarrh ("*cold on the chest*"): Bry., preceded by a few doses of Acon., *or* K.-Hyd.; Camph. *or* Kreas. (*at the outset*); Cin. 2x. Nux V.

Bronchitis: Acute—Acon., Ant.-T. 2x, K.-Bich., Bry., Ipec., Phos. 3 (*cough, expectoration of stringy mucus, Bronchorrhœa*); Lob., Ver.-Vir. Both in acute Bronchitis and Bronchial Catarrh a hot linseed-poultice to the chest is of great service.

In Children—Acon., Ant.-T., Phos., Ipec., Ver.-Vir., Lob. Dr. Ussher says nothing equals the last remedy.

In old Persons—Ant.-T., Amm.-Carb. (*difficult expulsion of mucus*); Coni., Carbo V., Sang., Seneg., Phos., Hydras., K.-Bich., Ars.

Chronic—Ant.-T., Hep.-S., Ac.-Nit., K.-Bich. 6, Ars. 3, Ipec., Merc., Hydras., Phos., Scilla, Stan., Senega, Sulph., Coni., Ferr.-Iod., K.-Hyd., Ammon.-Carb., Caust., Ars.-Iod., Rumex Crisp., Sang.; Ant.-T. (*gouty Bronchitis*); Lob. (*obstinate bronchial cough with dyspnœa*). In chronic Bronchitis, in the absence of acute symptoms, burning Sulphur in the room at night is very useful. As much Sulphur as would lie on a sixpenny piece may be put on a small quantity of red-hot coals; but ventilation at the same time should not be neglected.

See also **Cough.**

Bronchocele: *see* **Goitre.**

Brow-Ague: Sulph.-Quin., Glon., Bell., Nux V., K.-Bich., Chel., Ars., Cimic., Ars.

Bruise: *see* **Contusion.**

Bubo: Merc., Ac.-Nit., Merc.-Biniod., Aur.-Mur., Kali Iod., Phyto. int. and ext. Calendula on poultices.

Bunion: Arn., Ruta., Rhod., Kali Iod., Ver.-Vir. ext. (*if inflamed*); Hep.-S., *or* Sil.; *and* Calend. *or* Ac.-Acet. lot. ext. (*if suppurating*).

Burns and Scalds: Cotton-wool saturated with Lotion of Urt.-U.

(*simple injury*); Canth. (*blisters*), *or* Kreas. Olive Oil and Carbolic Acid (F. 32) to be applied on layers of cotton wool. On renewing the application, the lowest layer should not be removed, but re-soaked. "In treating burns by means of Ac.-Carbol., the pain is much more speedily relieved by leaving the injured surface exposed to the air, and applying the Carbol.-oil with a feather or Camel's hair pencil, at longer or shorter intervals as required" (*Dr. Dalzell*). When the ulcerative process has well begun, Calendula Cerate, thinned with Ol. Ol. The oil alone is, however, very soothing and comforting. Dr. Holland, from extensive experience in the treatment of burns, strongly recommends the Lin. Calcis. (F. 23). A thick lather made with soft water and Castile soap, often applied, is excellent. Petrol. and Ol. Ol. is also useful, and to destroy after-growths. Fuller's earth continually applied will dry up the exuded pus.

Ulcers from—Calend., Glyc. Cerate, *or* Urt.-U. (*see* F. 27) ext., *and* Sulph., Phos., *or* Ars. int.

Cæcum: Inflammation of — Lach., Ars., Rhus, Ver.-Vir., applied locally as a lotion (concentrated tincture ʒj. ad aq. ʒiv).

Calculus: Biliary—Ac.-Phos., Lyc., Chin., Calc.-C., Berb. ϕ, Canth.; Podoph. (*for expulsion*).

Spasm whilst passing — Nux V., Elat. 2x, Gels., Acon., Cham. Hot hipbaths or fomentations. Chloroform or Morphia by hypodermic injection is also recommended.

Vesical — Lyc., Cann., Canth., Merc. (*for early symptoms*). Surgical measures. A course of Friedrichshall and Carlsbad water. Ozonic ether, ʒss to ʒij, thrice daily in water, is said to have a solvent action on uric acid Calculi, which occur more frequently than all others.

See also **Gravel.**

Cancer: Ars., or Fowler's Solution, used with perseverance, Hydras. large doses, Phyto. (checks and alleviates pain, Dr. Stokes) *or* Coni. (*of the breast*); Phos. (*of the stomach*); Thuja (*epithelial*); Aur. (*of bone*). Ars.-Iod., Cundurango, Cicuta, Kreas., Aster. Rub., Galium Apar., Hydras. cold infusion ʒj. to Oj. of water, Brom. locally. Ac.-Carbol. int. and ext. is reported to have cured many cases. Several cases of Cancer of the lip have been cured by *Hydras.* ext. with *Ars.* int. at the same time.

Palliatives in—Acon. (from root) ϕ int. and ext., Ars. (*for pain*); K.-Chlor. ext., Coni. ext., Ver.-Vir. int. and ext.; Carbo An., Sep., Ac.-Carbol., Condy's Fluid, Charcoal, or fresh-ground Coffee (*as deodorisers*); Brom., applied with a glass brush, arrests hæmorrhage. In open Cancer of the breast, a lotion of Coni. is very soothing to the pain. Glyceroles of Coni., Ver.-Vir., Acon., *or* Phyto. (F. 9, 13). Sang. is said to prevent return of disease after *excision.*

Of Uterus: Hydrocotyle Asiatica. Chloralum Injection.

See also **Scirrhus.**

Cancrum Oris: *see* **Mouth**: Canker of.

Carbuncle: Bell. alt. Hep.-S. (*forming-stage and simple cases*); Apis (*much erysipelatoid swelling*); Sil. (*indolent*); Ars. *or* Lach., (*severe or malignant*); Carb. V. Tomato or yeast poultice. Boracic Ac. Ointment (Boracic Ac. powdered), drachm to an ounce of Vaseline. Lotion Liq. Calc.-Chlor. 1x, a drachm to the ounce.

Carcinoma: *see* **Cancer.**

Cardialgia (Mordens): *see* **Heartburn.**

Carditis: *see* **Heart**: Inflammation of.

Caries (unhealthy inflammation of bone, with softening, and molecular disintegration, from Scrofula, Syphilis, Mercury, etc.

See **Bone, Teeth, Jaw, etc.**

Catalepsy: Cann.-Ind., Opi., Cup.-Acet., Cic., Mosch. Dr. Ussher testifies to the homœopathicity of *Cann.-Ind.*, having seen large doses of the drug produce perfect catalepsy. Cold douche.

Cataract: Bell. (*from inflammation*); Calc.-C. (*in the strumous*); Sil., Colch., Chel., Asaf., Dig., Bary.-C., Amm. Carb., Sant., Cann., Coni., Euphr., Phos., Sulph.; Sang. relieves *senile* Cataract.

Catarrh: *see* **Cold.**

Chafing: *see* **Excoriation.**

Chancre: Merc., Ac.-Nit., Hep.-S., K.-Hyd., Phyto. Calomel *or* Phyto. locally.

Change of Life: *see* **Menstruation**: Cessation of.

Chapped-hands: *see* **Hands.**

Chapped-Nostrils: Calend. Cerate.

See also **Nose**: Soreness of.

Chest: Aching, Burning, or Weakness of—Acon., Ars., Phos., Ac.-Phos., Lilium Tig., Sulph., Bry.

Dropsy of—Bry., Apis, Ran.-Bulb., Arn. alt. Hep. *or* Ars. (*following Pleurisy*); Iod., K.-Hyd. (*in the scrofulous*); Dig. *or* Apoc. (*consequent on heart-disease*).

Pains in—Acon., Arn. (*stitch-in-the-side when walking*); Bry. (*pain catching the breath*); Ran.-Bulb., Phos. (*slight wandering pains*); Acon. (*shooting and severe*); Puls., Sep., *or* Cimic. (*under left breast in women, and intercostal Rheumatism*); Chel., Ac.-Oxal. As a local application for this and all muscular pains, the flat iron used in the laundry as hot as can be borne, with flannel between the skin and iron, is extremely valuable.

Soreness, Rawness, or Excoriation in—Ars., Phos., Bry., Hep.-S. (*rawness*); Sulph., K.-Hyd.

Tightness, Oppression, or Weight—Ars., Acon., Crot., Ign., Phos., Bry., Cact., Ipec., Ant.-T., Sulph., Camph.

See also **Lungs, Heart, Pleurisy, Breathing, Cough,** etc.

Chicken-pox: Acon. alt. Rhus; Bell. (*head-symptoms*); Apis (*excessive itching*); sometimes Canth. Ant.-Tart., Merc.-Sol. Inunction with camphorated oil relieves itching and allays inflammation (F. 25). Also thin starch.

Chilblain: Simple — Agar., Tamus, Rhus, Arn., Puls. int. and ext. Glycerole of Canth. and of Sulphurous Ac. (F. 12); Ham. lotion (F. 40); *or* Ac.-Carbol. ext.

Inflamed—Bell., Ver.-Vir., *or* Rhus, int. and ext.

Broken — Petrol., Agar., Hep.-S., Rhus; Calend. ext., Glycerole of Starch and Calend. (F. 3), or Lin. Calcis (F. 24).

Ulcerated — Ars., Petrol., Phos., Kreas., Ac.-Nit. A cerate or lotion of Calend., Rhus, Petrol., or Glycer., is a beneficial adjunct.

Tendency to — Sulph., Calc.-C., Phos., Puls.

Child-bed Fever: *see* **Puerperal Fever.**

Child-Crowing: *see* **Croup.**

Chilliness *and* **Coldness**: Fits of—Camph., Acon., Ars., Carb. V., Astacus Fluviat, Ced., Bry., Ver.-Alb.

Constant—Chin., Merc., Sep., Nat.-Mur., Helon.

See also **Shiverings.**

Chin-cough: *see* Hooping-cough.

Chin-whelk: *see* **Beard**: Acne of.

Chlorosis: Ferr.-Red., Ferr.-Iod., Ars.-Iod., Citrate of Iron and Quinine, ½gr. doses, Puls., Calc.-C., Sep., Nat.-Mur., Helon., China, Ferr.-Mur., Petrol., Calc.-C., Calc.-Phos., Arg.-Nit.

See also **Menstruation**: Scanty.

Cholera: Simple, English, or Sporadic — Camph. (*strong chills*); Chin. (*simple, with griping*); Ver.-Alb., Ver.-Vir., Acon. ϕ, Ars. (*sudden and violent vomiting and purging*); Iris (*bilious motions and colicky pains*); Cup., Ver.-Alb. (*cramps and blueness*); Acon. *or* Ars. (*collapse*); Dios., Euphor.

Asiatic, Malignant, Choleraic Diarrhœa, Cholerine, *or* Cholera Morbus—*Rubini's* Camph. (*early stage*), *or* Acon. in drop-doses of the strong tincture; Ars. (*when developed*); Ver.-Alb. (*vomiting and diarrhœa predominant*); Cup. (*severe cramps*); Phos., Ars., *or* Carbo V. (*typhoid conditions*); Chin. *or* Ac.-Phos. (*convalescence*); Acon., Ars., *or* Ver.-Alb. (*collapse*), Ac.-Hydrocy.

Infantum—Apoc., Ars., Oxide of Zinc in gr. j. or gr. ss doses every three or four hours. Acon., Euphor.

Chordee: Acon. int. and ext., Gels.,* Canth., Bell., Chlor.-Hyd.,† K.-Brom., Camphor lotion. Cold douche.

Chorea: Cup., Bell., Agar., Stram., Ars., Opi., Ign. (*from fright*; *recent and simple*); Cin., Sant., Merc. (*from worms*); Ver.-Vir., Strych. (*from cerebral irritation*); Aur. (*with Otorrhœa after Scarlatina*); Liq. Sod.-Chlor., small doses (*from uterine derangement*); Cimic., *or* Spig. (*in rheumatic patients*); Ars., Zinc., Cup.-Acet., Iod. (*chronic*); Calc.-Phos. (*in scrofulous children*). Liq. Ars.-Chlor. (Lond. Pharm.), 4 drops, gradually increased to 9 drops, thrice a day, will cure most cases. If headache or other symptom of disagreement ensue the dose may be lessened one drop. K.-Hyd. gr. ii. ter die, for 3 weeks (*Dr. Stokes*). The ether spray applied twice a day down the whole length of the spine. Cold or tepid baths. The shower bath in the milder forms of the disease. Galvanic chain worn round neck and down back.

Cicatrix: Phyto. 1x. "I have removed all marks of bad scrofulous Ulcers from a girl's neck by a long course of *Phyto.*; *Sulph.* occasionally; *Bell.*, or *Ac.-Fluor.* when they are inflamed; *Hepar-S.* with symptoms of suppuration" (*Dr. Ussher*).

Circulation: Languid — Leptand. (*from liver disease*); Dig. (*from enfeebled heart*); Sep. *or* Ferr. (*females with scanty or deranged period*); Sulph., Bell., Rhus T., Nat.-Mur. Also daily active exercise in the open air, the morning bath, and *vigorous frictions*. Sponging with cold water to which sea salt is added, is often preferable to the bath. (But see **Anæmia**.) Ling's specific movements—active and passive. Icy coldness of the legs and feet has been quickly relieved by the *spinal ice-bag*, used half-an-hour to an hour *once* or *twice* a day.

Circumcision: *see* **Phymosis**.

Cirrhosis: Merc.-Cor., Merc.-Iod., Dig., Ac.-Nit., Ars., Phos., Chin., Aur. Met., Ars.-Iod., Phyto.; Crot.-Tig. (*with Ascites*).

Clap: *see* **Gonorrhœa**.

Clergyman's Sore Throat: *see* **Throat**.

Climacteric Affections: *see* **Menstruation**: Cessation of.

Coccyodynia (*pain in the coccyx and its attachments*); Cic.; Ruta lotion (*from injury or pressure during labour*); Caust., Ant.-Tart., Cicuta, Sil., Kali B.

Cold: In the Head*—Camph., Gels.

* Dr. Douglas has communicated to us several cases of violent painful nocturnal erections, in which relief was rapid and permanent after a short course of *Gels.* ϕ, in drop-doses, repeated hourly, for several times.

† In a desperate case of Chordee, occurring in the first stage of Gonorrhœa, in which there was much hardness and congestion of the penis, and the pain so severe as almost to drive the patient to desperation, Dr. E. M. Hale gave 15 grs. of *Chlor.-Hyd.*, which produced immediate relief and sleep; the dose was repeated on the following evening, and the Chordee did not return.

* A correspondent in the *Medical Press and Circular* recommends the following remedy for Coryza:—Nitrate of Silver in powder, one part, Sugar of Milk nine parts. The whole should be reduced (triturated) to an impalpable powder, and about half a pinch drawn up the nostrils three or four times daily. In two days it is said to avert cold in the head and its consequences. During the treatment, *sneezing* and *blowing the nose* must as much as possible be avoided, so as not to shake the partitions of the nasal fossæ too much.

(*incipient cold with chills*); Acon. (*early stage with feverishness*); Dulc. (*from damp, wet, etc.*); Ars. (*thin, acrid discharge, with influenza taint*); Merc. 6 (*sneezing, thick discharge, sore throat, chilliness, and perspirations*); K.-Hyd. 3x (*sneezing and simple fluid discharge*); Puls. (*in females and children, thick fœtid discharge, and loss of taste and smell*); Plantago maj. (*much sneezing and toothache*); Nux V. ("*stuffy cold*"); Euph. ϕ, 3x (*acrid fluent coryza, profuse lachrymation and redness of conjunctiva*); Mez. (*pain in the lining membrane of the frontal sinuses*); K.-Bich. (*chronic catarrh, with tough sputa, digestive derangement, etc.*). Ars.-Iod., Graph., Nat.-Mur., Sang., Ant.-Tart. Dr. Stokes states that Catarrh may often be averted by pouring into the palm of the hand a few drops of Puls. 1, Ars. 2, Iod. 1, or Phos. 1; and that a single inhalation often suffices. Dr. Holland recommends a teaspoonful of table salt to a tumbler of water, to be sniffed up the nostrils three or four times a day. Turkish baths.

On the Chest—*see* **Bronchial Catarrh**, *and* **Bronchitis.**

Sensitiveness to—Camph., Rumex, Iod., Hep.-S., K.-Hyd., Sant 2x, Sulph.; Sep. (*females*); Dulc. (*best prophylactic against cold from damp*); Ars., Nat.-Mur., Merc., Sil., Ac.-Nit., Calc.-C. (*habitual*); Gels., Nux Vom., Phos., Sabad. Turkish baths.

Colic: Coloc. (*paroxysmal with diarrhœa*); Dios. (*bilious*); Bell., Plumb. (*with constipation*); Ver.-Alb. (*Colic, with or without diarrhœa, if accompanied by vomiting of bilious matter*); Iris, Collin. (*obstinate cases, with flatulence*); Colch. (*in gouty patients*); Nux V. (*tendency to colic; also from indulgence in food; and from fatigue*). A hot sitz-bath (deep), 98° to 100°, for ten to fifteen minutes, followed by friction of the abdomen for a minute or two with a cold, wet hand, is very useful; or large, hot fomentation.

In Children—Cham., Bry., Coloc., Cina, Nux V., Ipec., Stan.

In Nervous Females—Cocc., Plat., Sec., Caul., Ign. (*uterine*).

From Lead—*see* **Lead-Colic.**

Coma: *see* **Sleep:** Comatose.

Concussion: *see* **Brain, Spine,** etc.

Condylomata (*syphilitic warty excrescences*): Ac.-Nit., Thuja, Cinnab., Lyc., Sulph. (*glans*); Thuja, Ac.-Nit., Lyc., Merc.-Cor. (*prepuce*); Thuja (*scrotum*); Thuja, Euphr., Merc.-Cor. (*anus*); Puls., Sabi., int. and ext. Dried Sulphate of Zinc., Phyto. and Glycerine (F. 9); Iodide of Potash ointment (F. 51), ext.; ointment of the Acid Nitrate of Mercury (B. P.) applied night and morning.

Congestion: *see* **Brain, Liver, Lungs,** etc.

Conjunctivitis: Acon., Arg.-Nit., Merc.-Cor., Bell., Nux, Euphr., Ars., Ant.-Tart., K.-Bich., Sulph.; Gels., int. and ext.; Boracic Ac. lotion (eight grains to the ounce). Chlor.-Hyd., gr. j. for adults, and proportionate for children. Dr. Mackechnie adds, "For simple catarrhal conjunctivitis Nux V. is before all others." Dr. Burnett gives in the incipient stage when only redness and no exudation, Ferr.-Phos., 6 trit. Ars. (*chronic*).

See also **Eyes:** Inflammation of.

Constipation: Chronic — Sulph. 6; K.-Carb. 3x; Nux V. 6 (*irregular action*); Bry. *or* Opi. (*torpor*); Arn. (*pain across the hypogastrium, and general torpidity*); Plumb. (*obstinate cases, with passage of hard small balls*); Lyc. (*with flatulence*); Hydras. (*simple cases with debility*); Æscul. (*with Piles and much pain*); Collin. 1x, 3x trit. (*simple cases and those complicated by Piles or uterine disturbance*); Bell., Alum., Graph., Podoph., Nat.-Mur., Sep., Ac.-Nit., Magnes. Mur., Caust., Zinc., Iris, Gels., Spig. Also shallow sitz-baths for five to ten minutes, cold or 60° to 75°, according to reactive power. Friction of abdomen with the hand, after dipping it in cold water, for fifteen minutes in the morning.

Recent—Acon. (*with fever*); Bry., Nux V. alt. Sulph.

In Children—Bry., Sulph., Nux V., Caust., Æscul., Kreas. (*in emaciated children, with teething troubles*); Alum., Opi., Sil., Collin.

In Old Persons—Ant.-C., Opi., Hydras., Collin.

During Pregnancy: *see* **Pregnancy.**

Consumption: *see* **Phthisis Pulmonalis.**

Of the Bowels: *see* **Tabes Mesenterica.**

Contusion: Arn. lotion; Coni. (*of the female breast*); Ruta (*of the tibia*); Ham. (*with discoloration*).

Convulsions: Infantile — Bell. alt. Acon. frequently; Bell. (*red, swollen face*); Cham. (*from indigestion, colic, etc.*); Ign. *or* Cin. (*from worms*); Glon. (with *Hydrocephalus*); Cup., Ver.-Alb. (*with cramps*); Opi. (*from fright*); Gels. (*rigidity*); Ipec. (*blue skin with rigidity*); K.-Brom., 50 cases reported successful; Ac.-Hydrocy., Ver.-Vir., Chlor.-Hyd., Zinc.-Sulph., Æthusa. Also a warm bath, and, above all things, enemata of warm water. If these all fail, two drops of chloroform in gum-water, every fifteen minutes: this is reported to have saved many lives. The following is another method of using the chloroform, which we have known quickly curative, or if used when Convulsions are threatened, preventive of an attack: one part chloroform to two parts of olive oil, rubbed into the spine, along its entire extent. If the secretions are disordered, an addition of a tablespoonful of lime-water to each bottle of milk is often preventive of Convulsions.

Epileptic: *see* **Epilepsy.**

Hysteric: *see* **Hysteria.**

Puerperal: *see* **Puerperal Convulsions.**

Cornea: Specks on the—Cann.-Sat., Merc.-Cor., K.-Hyd., administered on alternate weeks; also using the same remedy as a lotion. Hydras. lotion is also recommended. Dr. Wheeler informs us that he has removed many opacities by a steady course of Phos. 6x and Sil. 6x. Dr. Ussher has found a course of Calc.-C. alt. Sulph. efficient. Also Euphr.

Corns: Hard—Arn. *or* Ruta int. and ext.; Sulph., Calc.-C., Sil. 3 and 30 int. Ferr.-Perchlor., Ac.-Nit., Castor-oil ext. Hydras. Ointment.

Inflamed—Sulph. Alternate hot and cold water as applications. Ver.-Vir. as a paint.

Soft—Arnica-plaster; Castor oil.

Corpulency: *see* **Obesity.**

Coryza (*Cold-in-the-head*): *see* **Cold.**

Cough: Dry—Acon. (*recent, burning dryness in throat, feverishness*); Bell. (*spasmodic, with cerebral congestion, worse at night*); Bry. (*hard, tight, irritating, shaking whole body, burning soreness under breast-bone, stitches in chest*); Caust. (*hoarseness, involuntary urination*); Lauro., Hyos., Coni. (*worse at night on lying down, or coming on about 3 a.m.*); Ac.-Oxal. (*worse at night, nausea, pain in back*); Sulph. (*obstinate, tight, following eruptions*); Iod., Brom., Spong., Ac.-Nit., Ac.-Sulph. spray (*laryngeal, tickling*); Lach. (*as if something in throat ought to be coughed up to afford relief*); Rumex (*worse when talking or in cold air, soreness under breast-bone*); Ipec. (*recent wheezing, nausea, or vomiting*); Phos. (*short, laryngeal, and bronchial tendency to lung disease, soreness in chest*); Graph. (*gruff voice*); Cimic. (*children, worse on going into open air*); Gels. (*severe in children*); Senega, Verbas. (*short, hard*).

Moist—Ant.-T. (*profuse, easy expectoration, vomiting—no remedy of wider range*); K.-Bich. (*tough, stringy mucus, difficult expectoration*); Puls. (*loose, worse on lying down, women, children*); Merc., Stann. (*chronic, purulent sputa, night sweats*); Hep.-S. (*chronic, due to organic disease, chronic indigestion*); Ac.-Nit. (*chronic, after subsidence of lung disease*); Phos. (*bronchial and lung disease brown*

sputa); Sulph. (*yellow mucus, Asthma, following eruptions*); Ars. (*debility, tight chest, difficult breathing at night*); Cocc., Cact. (*spasmodic, after midnight with vomiting, copious expectoration*); Mang. (*evening, difficult expectoration, relieved by lying down; morning, easy expectoration*); Sep., K.-Carb., Lyc., Scilla, Crotalus, Naja, Samb., Seneg., Sticta, Calc.-C., Alum., Cina, All. Cepa, Caps., Verbas., Menth. Pip., Viola Od.

See also **Hæmoptysis**: *and* **Voice**: Hoarse.

Nervous and Hysteric — Hyos., Ign., Ambra, Agar., Coral., Coni., Cup., Rumex, Nux V., Dros., Ipec.

Spasmodic—Dros., K.-Brom., Aral. Rac. (*tickling, retching, worse at night, like "hooping" without "hoop"*); Ammon.-Brom., Ipec. (*vomiting*); Nux V. (*headache as if bruised, stomach cough after meals*); Coral., Ac.-Nit., Cup., Carb. V., Ambra, Euphr., Ver., Bell. The frequency and violence of nervous coughs may be controlled by determined efforts of patient's will.

See also **Hooping-cough.**

Coup-de-Soleil: *see* **Sunstroke.**

Courses: *see* **Menstruation.**

Cracks in the Skin: of Hands and Fingers — Merc.-Cor.,* Petrol., Caust., Graph., Sil., Ars., Hep., Glyc. of Starch (F. 2) *or* Calend.-cerate (*if deep and bleeding*); Glyc. of Aloes (F. 1). The old method of touching the bottom of the crack with a crystal of the Sulphate of Copper is often sufficient treatment.

Lips and Nose — Merc., Graph., Nat.-Mur., Petrol., Calc.-C., Ars., Ant.-T., Sep., Phos., Glyc. of Starch (F. 2), or Aloes (F. 1). Aloes cures cracks in the skin of horses.

* A professional correspondent informs us of the cure of an old-standing case by *Merc.-Cor.* 3x trit., after *Ars.* and *Hep.-S.* had done nothing; avoidance of scrubbing and washing clothes was enjoined till the cure was effected. Similar cases have since been reported to us.

Cramp: *see* **Spasms.**

Crick-in-the-Back: Acon., Arn. (*recent*); Ant.-T. (Dr. Ussher recommends the 1x dilution), Rhus (*chronic*); Cimic., Bry., Nux V.

See **Lumbago.**

Neck—Acon. (*from cold*), either alone *or* alt. Bell., Ant.-T.; Dulc. (*from damp*); Bry., Nux V., Phyto.

Critical Age: *see* **Menstruation**: Cessation of.

Croup: Catarrhal—Acon. alt. Spong.; Bry. alt. Ipec. ϕ every ten minutes; Ammon.-Brom., Samb., Hep.-S., Bry.; *and* hot-water applications to the throat by means of a sponge.

Membranous—Iod., Hep., K.-Bich., Brom., Ant.-Tart., Spong. Inhalation of vapour from slaking lime; *or* tinct. of *Iod.* or *Brom.* dropped in *hot* water, the patient to inhale the vapour; *or* a tent may be formed over the patient's bed, and the steam conducted under it by a tube. Inhalation may be secured by surrounding the head with a continuous cloud of *Iod.* or *Brom.* spray.

Spasmodic—Acon. alt. Spong., Bell., Gels.; K.-Brom. (*with convulsions*); Mosch. by inhalation; Cup., Coral. Application to the throat of sponge wrung out of hot water.

Crusta Lactea: Viola Tric. (but the dyscrasia should be treated at the same time); Crot., Sep., Sulph., Cicuta, Calc.-Mur., Calc.-C., Rhus, Iris; Ars. (*cases of long standing*).

Cuts: *see* **Wounds.**

Cyanosis: Dig., Cup., Lach., Ars., Ver.-Alb., Laur., Rhus. The treatment can only be expected to be palliative.

Cynanche Tonsillaris: *see* **Quinsy.**

Cystitis: *see* **Bladder**: Catarrhal Inflammation of.

Dandriff: Ars., Graph., Sulph., Lyc., Sep., Rhus. Lotion of Borax, Camphor, etc. (F. 37). Lotion of Glycerine (1 pt.) and Sp. V. R. (2 pts.)

Deafness: Recent, from Cold—Acon., Bell., Merc., Gels., Dulc., Cham., Puls. (*especially when caused by draughts or wet while travelling*).

Chronic (*from enlarged tonsils*)—Bar.-Iod., Iod.-Sulph., Merc.-Iod., Iod., Bell., K.-Hyd., Calc.-Phos., *or* Bary-Carb., Turkish Baths. In Deafness from general debility, Toynbee recommends always to wash in warm water.

After Eruptive Fevers—Sulph., Bell., Merc., Chel. (*deranged liver*).

From Nervous Causes — Phos., Petrol. (*noises in the ear*); Ac.-Phos.; Chin. *or* Sulph.-Quin. (*periodic, or with roaring and buzzing noises in the head*). Hydras., Graph, Ambra, Elaps, Mang., Ferr.-Phos., are also useful.

Debility: Constitutional—Iod. (*tendency to faint, or to glandular enlargements*); Aletris, Carb.-V., Ars.-Iod., Ars., Merc., Ac.-Phos., Calc.-C., Ferr.-Phos. (*debility especially of children*). In some cases, mild water cure.

From Loss of Animal Fluids—Chin., Ac.-Phos.; Helon., Ferr. (*anæmic*). Glycerine, or Cod-liver oil.

Nervous—Ac.-Phos., Mosch., Nat.-Mur. (*feeble pulse, cold extremities, dejection, etc.*); Ign., Nux V. (*from bad habits*); Chin., Ver.-Alb., Anac.

Delirium Tremens; Opi. 1x, Bell. ϕ, Agar., Stram., Nux V. ϕ, Hyos., Ant.-Tart., Ars., K.-Brom. ϕ ʒss. Capsicum, *or* strong coffee in large doses. Dr. Dalzell reports *Stram.* 1x, in drop doses, every one or two hours, has acted splendidly in two very bad cases, characterised by *violent, noisy* delirium, and *complete Insomnia*. Dr. Dyce Brown obtains rapid improvement from Bell. ϕ gtt. ij. every two hours.

Dengue: Acon., Bry., Rhus, Eup. Perf.; Gels., Ver.-Alb. (*cramps*); Merc., Clem. (*swellings*).

Dentition: Disorders during—Cham. (*fretfulness and sour diarrhœa*); Acon. (*feverishness*); Bell., Ver.-Vir., *or* Gels. (*head symptoms, and convulsions, with redness of the face*); Kreas. (*emaciation, great irritability, wakefulness, and constipation*); Calc.-Phos., Calc.-C. (*too early or too late*); Phyto., Merc.-Sol., Sil.

Depression of Spirits: Ars. (*with emaciation*); Merc., Nux V., *or* Podoph. (*with biliousness or liver derangement*); Ign. (*from nervous causes and mental emotion*); Puls., Plat., Cimic. (*in females, with deranged menstruation*); Aur. 1, K.-Brom. (*suicidal tendency*); Ac.-Phos., Tarent. (*with nervous debility*); Arn. (*with much sighing and weak heart*); Sec., Sulph., Chin., Lyc., Con., Nat.-Mur. Plumb. Acet., Spig., Helleb. Warm baths, for short periods.

Derbyshire-Neck: *see* **Goitre.**

Diabetes: Uran.-Nit., Ac.-Phos., Ars., Nux V., Tereb., Helon., China, Gentian., Spong., Scilla, Mur.-Purp., Nat.-Sulph. Dr. Maffey has seen very marked benefit in the case of a lady aged 65, from *Ars.* and *Nux. V.* Liq. Potassæ, ⅛ drop doses, has reduced the urine from 8 pints to 4 pints, and the sp. gr. from 1030 to 1020.

Diarrhœa: From Indigestible Food—Puls., Nux V., Ant.-C., Ipec.

From Cold—Camph. (*sudden, with chilliness*); Acon., Merc., Dulc. (*damp*); Coloc. (*with colic*).

Chronic — Chin. (*in afternoon*); Ars., Merc.-Cor., Podoph.; Puls. (*nocturnal*); Leptand, Aloes, Merc.-Cor. (*dysenteric, with piles*). Ol. ric. ϕ, gtt. ij. Milk diet.

Dysenteric—Lept., Merc.-Cor. 3x, Coloc. 2x, Podoph.; Aloes (*with piles*); Merc.-Dulcis 1x trit. iii.-v. grs. for adults (*from disease of the liver*).

Morning—Apis, Rumex, Ac.-Phos., Podoph., Nuphar, Bovista.

Summer—Chin., Iris, Ver., Ars., Ac.-Phos.

In Children — Cham., Merc., Rheum, Calc.-C., Iod., Iris, Ars.; Psorinum (*terribly offensive, brown*); Crot.-Tig. (*yellow, green,*

watery stools); Chin., Ferr., *or* Pepsin ϕ (*passage of undigested food*); Sulph. ϕ

See also **Tabes Mesenterica.**

In the Aged—Ant.-C., Phos., Ars., Carbo Veg. Colch., Apocy., Ac.-Benz., Petrol., Mag. Carb., are additional remedies.

Diplopia: *see* **Sight**: Double.

Diphtheria: Acon., Bell., Phyto. (*mild, simple cases*); Merc.-Biniod. 2x, 1 gr. every hour for four doses, then every two or three hours; Glycerine every three or four hours; plenty of good soup and wine. Bapt. (*typhoid symptoms*); Merc.-Iod. (*much swelling of the glands*); Apis, Lach., K.-Bich., Iod.; Ac.-Mur., Calc. Chlorin., Ars. alt. Ammon.-Carb., Merc. Cyan. (*malignant, with great prostration and severe typhoid condition*); Ac.-Mur., *or* Ac.-Nit., Gargle of Phyto., *or* K.-Permang., Ac.-Sulphˢ. spray; *and* inhalation of vapour of slaking lime continuously. Sen., Canth. Chloralum, as a gargle, diluted as required. Alcohol applied by brush or atomizer. Gargle:—Brom. ʒj., Glyc. ʒj., mixed with water, or as a paint to the throat. In an epidemic that occurred in Melbourne, Dr. Gunst found the following gargle of the greatest service:—One drachm of Milk-of-Sulphur suspended in a pint of water. A teaspoonful of brewer's yeast every two hours has proved of great benefit.

Sequelæ—Phyto. (*hoarseness, etc.*); Dig. (*enfeebled heart*); Gels., Ac.-Mur., Ign., Coni., *or* Strych. (*Paralysis*); Chin., Helon., *or* Sulph.-Quin. (*debility*); Phos., Rhus, Sulph., Sec. (*diarrhœa*); Ars. (*Albuminuria*).

Distention: Puls. (*after a meal with desire to loosen the dress*); Chloroform (*flatulent*); Carb. V., Lyc.

Dizziness: *see* **Vertigo.**

Dropsy: General—Dig. (*from heart disease*); Ars., Elat., Apis, Hell., Chin., Apoc.; Acon. (*recent febrile*).

Local—Apoc., Ars., Apis (*abdomen: see* **Ascites**); Ars., Bry., Dig., Hell. (*chest*); Ars., Apis, Ferr., Sulph.-Quin., Chin. (*extremities*); Apis, Ars. (*face*); Hell., Apoc. Bell., Sulph., Calc.-C., Silic. (*head*); Acon., Iod., Puls., Bry. (*joints*); Iod., Rhod., Aur. (*scrotum*); Ars., Iod., Dig. Dropsy from kidney-disease is said to be greatly helped by skim-milk diet, as recommended in **Bright's Disease**, q. v.

Post-Scarlatinal — Ars., Apis, Apoc., Canth., Tereb. (also after intermittent fevers), Sulph., Zinc. Great attention to the skin, smart sponging with hot saline water, and towel rubbings, followed by inunction of olive or cod-liver oil.

Drowsiness: Morbid—Acon. (*with yawning and general weariness*); Lyc. (*after dinner, with atony of the digestive organs*); Opi. (*preceded by excitement*); Cinnabar.

See also **Sleep**: Comatose.

Dumb-Ague: Ipec., Carbo Veg., Ced.

Dysentery: Acon. ϕ alt. Merc.-Cor. 3x; Coloc. (*much colic*); Ham. 1x (*much blood*); Carbo Veg. (*chronic in the strumous*); Bapt. 1x (*passive*); Ipec., Podoph. (*children with prolapse of bowel*). All recent cases of dysentery that I recollect have yielded quickly—*i.e.*, within two days—to Merc.-Cor. 3x trit., if without much pain; if with pain in the abdomen, Merc.-Cor. alt. Coloc. We do not recollect *any* failures.

Chronic—Aloes (*much straining, also when piles are present*); Sulph.-Quin. (*periodic*); Ac.-Nit., Merc.-Cor., Nux V., Ars., Sulph., Rhus Tox., Sil. Tig.

Dysmenorrhœa: *see* **Menstruation**: Painful.

Dyspepsia: Acute—Nux V. (*from indigestible food; pain, spasms, etc.; or after mental exertion*); Puls., Carbo Veg. *or* Ant.-C. (*from rich, fatty food, especially in children, the aged, and females*): Carbo V. (*in the aged*); Ipec. Coff., Acon., Bry.

Chronic—Nux V. (*pain after food, headache, flatulence, and constipation with urging, Piles, etc.*); Bry. (*sense of pressure, as of a stone in the stomach, with tenderness; congestive headache; head and stomach symptoms, worse with every movement; constipation without inclination to stool*); Puls. (*nausea, heart-burn, flatulence, and vomiting of mucus, or diarhœa*); Carbo Veg. 6x (*oppression of the chest, with "fluttering" or palpitation of the heart from excessive flatulence, foul flatulence, acidity, and offensive diarrhœa*); Lyc. (*weakness, much flatulence, sleepiness after even light meals, and chronic constipation; acid risings, especially in old persons; lithic acid deposit in urine*); Merc. (*depraved taste, offensive breath, waterbrash, oppression after food, "biliousness," costiveness, pale stools, and depression of spirits*); Pepsin 1x trit. (*distress after food, regurgitation of wind, retching,* see F. 59); K.-Bich. (*chilliness, sense of coldness in stomach, yellow-coated or red tongue, heat of hands, dryness of mouth, etc.*); Rob. (*acidity with gaseous eructations*); Ign., Nux V. (*from grief, care, etc., with nervous symptoms*); Cham. (*in children and females, from worry, or from cold, with "bilious" headache, irritability*); Hydras. (*atonic or acetous dyspepsia, flatulence, torpidity of the liver, constipation, and languid circulation; sense of "goneness"*), also Cimic., Bapt., Gels.; Sulph. (*chronic constipation, Piles, eruptions, etc.; strumous dyspepsia;* also as an intercurrent remedy, and frequently alt. Nux V.); Hep.-Sulph. (*obstinate cases; also when* Mercury *has injured the patient*); Chin. *or* Sulph.-Quin. (*flatulence, anorexia, drowsiness, and oppression after eating*); Ant.-T., Ipec. (*retchings and vomitings*); Acon. *or* Ars. (*from cold*); Calc.-C. (*indigestion with gulping up of food soon after it is swallowed—a kind of rumination*); Abies Can. (*craving for pickles and other coarse foods*); Abies Nig. (*loss of appetite in morning, craving for food at noon and night*); Lept. (*pale tongue, depraved taste, foul breath*); Calc. C. (*ravenous hunger, waterbrash*); Kali Carb. (*dry sore tongue, distention, sick headache*); Sang. (*bitter vomiting*); Nat. Mur. (*"swashing" and fermentation in abdomen*); Ant. Crud. (*tongue milky white*); Ac. Carbol. (*acute dyspepsia*); Alumina (*deficiency of gastric juice*); Æthus (*inability to digest milk*); Anacar. (*symptoms disappear after eating and return in two hours*); Arn. (*from over-exertion*); Petrol., Ars. Rhus, Gels., Iod., Bismuth, Arg.-Nit. 3, Zinc. Abdominal compress is a valuable adjunct. Excessive use of tea, or other hot beverage, twice a day is often a cause of indigestion, and has sometimes to be entirely given up.

Constitutional *or* Dyscratic—Calc.-C. alt. Puls. *or* Rob. (*chronic acidity, with tendency to diarrhœa*); Sulph. alt. Nux V. (*flatulence, biliousness, tendency to constipation*); Ferr., Helon. (*anæmic patients*); Phos., Iod., Ars., Sil.

Dyspnœa: *see* **Breathing**.

Ear; Aching of—Acon., Puls., Bell., Cham., Merc.-S., Ver.-Vir., Gels., (*with toothache*); Chin., Staph. (*periodic*). Puls. seems to be a special ear medicine. Locally, Plantago ϕ and Water equal parts, warmed, may be dropped into the ear every hour.

Inflammation of—Acon. alt. Bell. *or* Puls.; Bell., Merc.-S., Apis.

Discharge from and Soreness of—Merc., Ac.-Carbol. locally (*thick, bloody, and fœtid discharge*); Puls., K.-Bich., Aur. (*thin discharge; and when it follows Measles*); Aur. (*yellow, fœtid discharge*); Ac.-Mur. (*Eczema, with burning itching; and when following Scarlet Fever*); Calc.-C., Ars., Hep., Sulph. (*chronic*). Kali Mur., Borax. Six grains of finely powdered boracic acid to be blown into the ear at bed-time, is recommended by Dr. J. H. Clarke.

Noises in—Sulph.-Quin., *or* Ac.-Phos. (*with deafness*); Nux V. *or* Ign. (*sensitiveness to sound*); Bell., Ver.-Vir. (*ringing noises from congestion, with nausea*); Dig.

(*buzzing or noises like a steam engine*); Mosch., Puls., Acon., Macrot., Graph. (*roaring, thundering*); Sod. Salicyl.

Ecchymosis (*discoloration from extravasation of blood under the skin, as from a bruise*); Arn. (*when quite recent*); Ham. (*much discoloration*); Ac.-Mur. (*petechiæ*); Rhus, Ruta, Phos.

See also **Purpura Hæmorrhagica.**

Ecthyma (*a cutaneous pustular disease*): Ant.-T., Ars., Merc., Rhus, Jug.-Reg.

Eczema: Simple.—Acon. alt. Rhus, Ven., Merc., Sep., Led.-Pal., Crot.-Tig., Sulph. ("*heat spots*"); Sulph. (*much itching*); Clem., Jug.-C., Cicuta, Bovista, Oleander. Prof. Wilson's ointment of Benzoated Zinc has a most admirable effect in healing Eczema. "It does not *drive the eruption in*, as it is termed" (*Dr. Johnson*). General bathing is of great value in Eczema, as it promotes the functional activity of healthy skin, and so compensates for the defective action of diseased portions. For this purpose, pure rain water is best. Patients should eat some vegetable salads every day, on account of the potash salts they contain.

Rubrum (*great redness and burning*): Ars., Ant.-T., Nux Jug., Rhus Ven., Crot.-Tig., Merc., K.-Bich., Phos., Petrol.

Scalled Head *and* Milk-crust—Merc.-Cor., Rhus, Graph., Viola Tric., Ant.-T., Calc.-C., K.-Bich., Sil., Hep.-S., Nux Jug., Iris, Vinca Minor. Vinca Minor, as glycerole or ointment. Lotions of Carbolic Acid (F. 32).

Elephantiasis Arabum (*a blood disease in which the skin resembles that of an elephant*): Myristica Sebifera, Hydrocotyle Asiatica, Ars.; Ac.-Nit. (*syphilitic taint*); Anac.

Elephantiasis Græcorum: *see* **Leprosy.**

Emaciation: Ars., Iod., Ferr., Merc., Chin., K.-Hyd., Calc.-C.

See also **Atrophy.**

Emissions: *see* **Spermatorrhœa.**

Encephalitis: (*inflammation within the cranium*): Acon. alt. Arn. (*if from an injury*); Bell., Ver.-Vir., Hyos., Opi. (*for the brain symptoms*); Bry., Hell., Apis (*effusion*). "In Encephalitis and every form of inflammation of the brain and its membranes," writes Mr. Nankivell, "I apply cloths wrung out of *hot* water, renewing them as soon as cool. This is more homœopathic and beneficial than cold."

Endocarditis: *see* **Heart**: Inflammation of, and its Membranes.

Enteralgia: *see* **Bowels**: Pain in; *also* **Colic.**

Enteric-fever (*Typhoid Fever*): Bapt. (*earliest symptoms*); Ars. (*developed disease*) alt. Ipec. (*excessive diarrhœa; also with Epistaxis*); Ver.-Alb. (*involuntary diarrhœa*): Ars., Ac.-Mur., *or* Rhus (*extreme prostration*); Tereb. *or* Ac.-Nit. (*intestinal hæmorrhage*); Phos., Bry. (*lung complication*); Hyos., Bell., Opi. (*brain disturbance*); Ac.-Phos., Chin., Ammon.-Carb., *or* Nux V. (*debility following*). The united testimony of numerous physicians is in favour of *Bapt.*, which, when given early, is almost invariably successful. If the case has not been seen early, *Bapt.* should still be given, but in alternation with *Ars.* or *Ac.-Mur.*, Agar., Ham., Tereb., Merc.-Cor., Merc.-Cyan.

Enteritis (*Inflammation of the bowels*): Acon. alt. Merc.-Cor., Ver.-Vir., Coloc., Ars., Merc.-Dulc., Canth. Also *hot* fomentations, and a wet compress.

Epididymitis: Coni. 1, Puls. 1.

Enuresis: *see* **Urine**: Incontinence of.

Epilepsy: Recent—Ign. (*in children and females*); Viscum (*menorrhagic subjects*); Ac.-Hydroc., K.-Hyd., Bell. in 3 to 5 drop doses, Ver.-Vir., Cic. V., Croc., Stram., Arg.-Nit.

Chronic — Bell., Cup., Arg.-Nit., Hyos., Stram., Zinc., Calc.-C., Sulph.; Opi. (*fits in sleep*); Cina, Sil., Teuc., Ign. (*from worms*); Nux V., Agar., Opi., Cocc. (*from*

alcohol); Phos., Ac.-Phos., Chin., Nuph., Arg.-Nit., Ferr. (*from sexual excesses*); Chlor.-Hyd., in gr.ss. vel. ‡, two or three times a day (*petit Mal*); Plumb., Ars., Cic., Zizia, Scutel. K.-Brom. is often palliative when other remedies fail.

Epistaxis: *see* **Nose**: BLEEDING FROM.

Erections: ABNORMAL — Ac.-Phos., Lyc., *or* Nuph. (*feeble and painful*); Acon., Bell., Gels. Camphor Pills (*spasmodic*).

See also **Chordee.**

Eructations: Nux V., Bry., Arg.-Nit., Lyc. 3, Puls., Arn., Rob., Iris, Ac-Sulphˢ., Calc.-C., Ars., Ver.-Alb. 1, Dios. 1, Carbo Veg., Ac. Carbol., Abies Nig., Nux Mosch.

See **Dyspepsia.**

Eruptions: GENERAL—Rhus, Ran.-Bulb. (*vesicular with much itching*); Sulph., Merc. (*non-vesicular, with excessive itching, worse in warmth*); Bry. (*papular, burning itching*); Acon. (*recent burning itching, dryness of the skin*); Ars. *or* Phyto. (*chronic, much burning, and formation of scales*); Ant.-T. *or* Senec. (*pustular*); Apis *or* Led.-Pal. (*similar to bee-stings, with stinging, itching, and œdematous swelling*); Canth. (*patchy eruption, with superficial redness, and burning*); Bell. (*bright red patches*); Puls. (*similar to Measles*); Calc.-C., Rhus, Viola Tric., *or* Graph. (*formation of scabs*); Hep.-S. (*dry scabs*); Staph. (*stinking*); Sil., Sep., Phyto., Lyc., Phos., Clem.

SUPPRESSED—Sulph., Bry., Ant.-T., Camph., Puls., Cup. Acet.

See also **Eczema, Psoriasis, Herpes, Acne, Nettle-rash,** etc.

Erysipelas: Acon. *or* Ver.-Vir. int. and ext. (*at commencement and occasionally during its course*); Bell. (*bright redness with very little swelling: also when brain is involved*); Apis (*much swelling*); Rhus (*simple vesicular*); Canth. int. and as a lotion (F. 25) (*vesicular with much burning; also for* Arnica-*erysipelas*); Ver.-Vir. (*vesicular, with severe head symptoms*); Ars. *or* Lach. (*much prostration; and when the disease assumes a low type*); Sulph. (*chronic*). Also Ver.-Vir. ϕ ext., 10 to 20 drops to eight ounces of water, or pure tinct. as a paint. Also Glycerole of Bell. *or* Ver.-Vir. (F. 31) covered with muslin. Chin., Rhus V., Ver.-Alb., Hep.-S., Ars., Crotalus, Cup. Acet., Graph., Aur.-Met. are also recommended. Professor E. Wilson recommends the following as specific in Erysipelas, even in severe cases, and when involving the head:—Twenty-minim doses of Tinct. of the Perchloride of Iron, administered every two hours, preceded by a clearance of the *primæ viæ*, and the regulation of the functions of digestion and assimilation. Mr. Nankivell says:—"In dangerous cases of Erysipelas of the scalp, with delirium, I believe it to be good practice to make a great many fine punctures, or scarifications, with a good lancet, and then use soap and hot water." Bell. alt. Apis (*E. of penis*), dose, 5 drops 2x dil. every four hours. Envelop organ in wet cloths covered with oiled silk.

Erythema (*a superficial inflammatory redness of the skin*): Bell., Acon., Mezer, Apis, K.-Bich., Nux V., Ferr., Rhus (*E. nodosum*). Various correspondents report many cases cured by the last-named remedy.

Excitement: MENTAL—EFFECTS OF—Acon., *or* Bell. (*headache and palpitation*); Coff. (*sleeplessness*); Cham. (*with bilious derangement*); Nux V., Opi.

Excoriation: Cham. (*in infants*); Lyc., Sulph., *or* Calc.-C. (*unhealthy subjects*); Merc.-S., Æthus., Calend. *or* Hydras. ext.

PREVENTION OF—Tepid washing, careful drying, and Calend. lot., morning and night, for the earliest symptoms. Starch powder, or a weak solution of Borax (F. 36). Bismuth powder. Zinc Oxide.

Excrescences: In Wounds, etc.—Ac.-Nit., Carbo An., Sil., Ac.-Carbol. ext. (*for "proud flesh"*); Ars., Ant.-C., Phos., Lach., Thuja, Phyto. Sugar, or Soap and Sugar, locally applied.

See also **Warts.**

Exhaustion and Fatigue: Mental—Arn. 3x, Ac.-Phos., Nux V., Gels., Calc., Ign., Anac., Sil.

Muscular *or* Physical—Arn., Gels. 1x or ϕ, Ruta, Rhus, Hydras. Arnica bath. Strong beef-tea.

See **Myalgia.**

Exophthalmic Goitre: *see* **Goitre**: Exophthalmic.

Expectoration: *see* **Cough**: Moist.

Extremities: **Hands, Feet,** etc.

Eyes: Aching of, *and* Pain in—Spig., Cimic.; Ruta, Euphr., Nat.-Mur., Sant., Arn. int. and ext. (*from over-use*); Nux V. (*over-use, especially by artificial light*); Gels. (*pain in the eyes with dizziness*); Euphr. (*profuse lachrymation*); Acon., Bell. (*burning in eyeballs, with frontal headache*).

Black—Arn. *or* Ham. ext.

Blear-Eyes—*see* **Eyelids**: Granular.

Blood-shot—Acon. (*recent, from cold*); Bell.; Arn. (*from mechanical causes—sneezing, foreign bodies, etc.*); Ars. (*chronic; also with ulceration of cornea*); Spig., Cact., Sulph. (*scrofulous Ophthalmia*).

Inflammation of—Acon., Euphr., Merc., Chlor.-Hyd., Arg.-Nit., Macrot., *or* Sulph. (*catarrhal*); Merc.-Cor., Bell., Coni., Nux V., Spig., *or* Gels. (*great intolerance of light*); Ars., Ant.-T. (*great intolerance, with strumous Ophthalmia*); Clem., Calc.-C., Hep.-S., Iod., Hydras., *or* Sulph. (*chronic and strumous*). In strumous Ophthalmia, the instillation of Atropine—gr. j. ad aq. des. ʒj.—giving Bell. internally at the same time, and afterwards Sulph. *or* Ars., is almost invariably successful. Merc., Ac.-Nit., Aur., K.-Hyd., *or* Thuja (*syphilitic*); Arg. Nit. *or* Calc. (*in infants*); Ars. (*corneal ulceration*); Puls., Bell., Merc., Ant.-T. *or* Sulph. (*following the eruptive fevers. Also* Calend. ext. (*for soreness*); Euphr. (*profuse discharge of tears*). *Poultice.*—An excellent poultice may be made by mixing a pinch of powdered alum with a tablespoonful of cream, and clotting the whole by means of a gentle heat. This not only relieves the pain, but reduces the inflammation and prevents agglutination of the eyelids.

Irritation of: Ac.-Nit. (*chronic*).

Over-use of—*see above.*

Specks *or* Spots floating before—Hyos., Bell., Cocc., Coni., Merc., Ruta, Chel., Solanum (*rings and gauze before the eyes*); Crocus (*feeling as of gauze before the eyes*); Ferri Cit. et Quin. (*from Anæmia*).

Weakness of—Ruta int. and ext.; Sulph., Phos., Iod.; Ver.-Vir. (*dimness from congestion*); Bapt., Ac.-Oxal., Nux Mosch., Caust., Sant., Nat.-Mur.

Wounds of—Acon. alt. Arn.; Arn. *or* Calend. ext.—in *weak* lotion.

See also **Sight** *and* **Amblyopia.**

Eyelids: Agglutination of—Merc.-Cor., K.-Bich., Calc.-C., Hep.-S. 2x, Sulph., Puls. Bathe the eyelids with warm water, then with a lotion of *Hyposulphite of Soda* (grs. viij. ad aqua ʒss), to remove the scabs. At night the edges of the eyelids should be smeared with *Sulphur Ointment* (F. 55), or any grease or oil.

See also **Eyes**: Inflammation of.

Granular—Merc.-Cor., Ars., K.-Bich., Graph., Hep.-S., Sulph., Calc.-C., Puls., Phyto., Zinc., Calendula lotion.

Stye on—Puls. alt. Acon.; Hep.-S., Sulph., Calc.-C., Apis, Merc.-Iod., and ointment of (F. 49); Thuja (*chronic*); Sulph. *or* Staph. (*to prevent recurrence*).

Vesicles on—Rhus, Hep.-S. *Also* Calend. *or* Euphr. ext.

Face: Ache—Acon. (*from cold or depressing influences*); Bell. (*redness of the face and brain-disturbance*); Cham. 3x and Merc.-S. 5x alt. every two or three hours (*one-sided face-ache from cold*); Coloc., Cimic. (*severe neuralgic cutting or shooting pains*); Ars. (*periodical*); Spig. (*pain extending to the orbits*); Gels. (*with twitching of the face*); Verbas. (*pain in jaw external to ear*); Chel. (*morning neuralgia; or from hepatic disorder*); Cimic. (*with uterine derangement*); Cham. (*with swelling and irritability*); Chin.-Sulph., 1 or 1x trit. (*face-ache relieved by pressing a cold object on the cheek, or by walking up and down a room*); Glon., Plantago.

See also **Gum-boil, Toothache,** *and* **Neuralgia.**

Pale and Sunken—Ars. (*emaciation*); Ferr., Helon. (*anæmia; see also* **Anæmia**); Calc.-C., Iod., Ac.-Phos.; Chin., *or* Cina (*from worms*).

Redness of—Nux V. (*flushing after meals*); Acon. (*from excitement*), *or* Bell. (*scarlet redness*); Sep. (*flushes*); Carbo Veg., Ign., Croc., Ferr.

Sallow—Merc., Chin., Bry., Podoph., Ars.

Swelling of—Bell. (*with bright redness*); Cham. (*with toothache*); Apis (*puffy swelling*). Local applications of hot and moist chamomile or elder flowers in flannel. *See also* **Gum-boil.**

Fæces: Bry. (*very large*); Merc. (*pale and costive, with depressed spirits*); Nux V., Collin. 1x trit. (*hard and large, and expelled only after frequent effort*); Nux V. (*when the difficulty arises from irritable spasm of sphincter*); Sulph. (*knotty*); Plumb. (*dark, hard, small balls*); Opi. (*dark and knotty, with great torpor of the bowels*); Alum (*soft but difficult*); Dig. (*white*); Graph. (*hard and knotty*); Ars., Chin., *or* Ferr. (*containing undigested food*); Ars., Ver.-Alb. (*watery*); Sec., Phos., *or* Ac.-Phos. (*passed involuntarily*); Puls., Cham., Caps., *or* Merc. (*mucous*); Leptand. (*black*).

See also **Diarrhœa, Dysentery,** etc.

Fainting: Mosch. *or* Camph. by olfaction; Acon. *or* Opi. (*from fright*); Nux V., Nux Mosch. Also the horizontal posture. "I have seen a patient nearly dead from neglect of this. The case was desperate, and the syncope so intense that I had to place the head much lower than the body before the brain responded and sent nerve-power to the heart" (*J. H. Nankivell, M.R.C.S.*). Breathing steadily helps to raise the pulse.

Tendency to—Iod. (*from constitutional causes*); Chin. (*from loss of fluids*); Ars. (*great debility*); Ver.-Alb. (*coldness and blueness of the skin, with clammy sweat*); Nux Mosch. (*neurotic patients, who wake early with a dry mouth*); Cham., Cocc., *or* Ign. (*hysterical*).

Faintness: Sense of at Epigastrium—Cimic., Ign., Hyd., Sulph.

Falls *and* **Stuns**: *see* **Contusion,** *and* **Brain, Spine,** etc.

Famine-Fever: *see* **Relapsing Fever.**

Fatigue: *see* **Exhaustion.**

Favus: *see* **Porrigo.**

Fear: *see* **Fright.**

Febricula: Acon.; Camph. (*sudden chilliness*); Bell. (*headache*); Ars. (*with prostration*); Bapt. (*with gastric symptoms*); Gels. (*fever of remittent type, passing off without perspiration*).

Feet: Aching, Blistered, *and* Sore—Arn. int. and ext. as a bath (*from over-walking*); Arg.-Met.

See also **Myalgia.**

Burning in—Canth. (*in the soles at night in hysteric females*); Carbo Veg. *burning, tender, cannot bear boots, nor walk*); *Calc.*-C., Graph., Sil., Phos., Ac.-Phos., Led.-Pal., Apis, Secale, Sulph.

Chilblains on—*see* **Chilblains.**

Coldness of—Sulph. (*with hot hands and face*); Ferr., Sil., Nat.-Mur., Sep., Puls., Graph., Carbo Veg. Daily use of the skipping-rope,

walking, or other active exercise; also sufficient meat and other stimulating diet. Washing the feet *with* but not *in* cold water every morning.

See also **Circulation**: LANGUID.

GOUT IN—Rhus, Led.-Pal., Rhod., Sulph., Sab., Arn., Lyc. Friction with oil for twenty minutes morning and night.

PAINS IN—Bry. *or* Led.-Pal. (*rheumatic or gouty*); Rhod. (*neuralgic*); Rhus Tox., Apis, Caul., Colch., Ran. B. Frictions with oil.

PERSPIRATION OF—Sil. (*suppressed or excessive*; *fœtor*); Calc.-C., Lyc., Graph., Petrol., Ac.-Nit. Frequent washing in water to which a little Condy's Fluid is added.

SWELLING OF (ŒDEMATOUS)—Ars. (*with emaciation*); Chin. (*with simple debility*); Ferr. (*with anæmia*); Ham. ϕ ext. (*painful swelling of great toe*); Sil., Apis, Phos., Puls., Caust., Sulph. Friction with oil.

WEAKNESS OF—Chin., Sulph. Friction with oil.

See **Ankles.**

Felon: Sil., Ac.-Carbol. 3x, Apis.

See **Whitlow.**

Fester: Ac.-Nit. int. and locally.

TENDENCY TO—Petrol., Sil., Graph., Hep. S.

Fever: SIMPLE, and SIMPLE CONTINUED—Acon. (*full, bounding, quick pulse, aching pains in the limbs, without brain-symptoms*); Ver.-Vir. (*same as* Acon., *but with gastric and brain disturbance*); Bell. (*brain-disturbance,—red face, throbbing temples, etc., and moderate pulse*); Gels. (*remittent, or passing off without perspiration; "inward fever"*); Bry. (*heavy stupefying headache, shooting pains in limbs*); Ars. (*prolonged, occurring in feeble patients*); Bapt., Ars., Ac.-Mur. (*low fever;" typhoid symptoms*). In simple continued fever, *Bapt.* should be given early, especially when *Acon.* does little good.

Fibroma: Sil., Lyc., Calc.-C., Ars.

Finger: GATHERED—*see* **Whitlow.**

Fissures: *see* **Cracks.**

Fistula: Sil., Calc., Ac.-Fluor., Caust., Aur., Sulph., Phyto., Lyc., Calc.-Phos. Calendula lotion. Hydras., Ac.-Nit., Bellis P., Berb., Æsculus, Thuja, Ham., Phyto. Surgical measures sometimes necessary.

See **Anus**, etc.

Fits: *see* **Epilepsy, Hysteria, Fainting, Apoplexy, Convulsions**, etc.

Flatulence: Nux V., Carbo Veg., Nux Mosch., Puls. (*of stomach*); Asaf., Chin., Lyc. (*of abdomen*); Tereb., Collin., Arg.-Nit., Ac.-Carbol., Lach., Calc.-Iod.

See also **Dyspepsia.**

Flatulent distention: Chloroform in drop doses.

Flooding: *see* **Labour** and **Menstruation.**

Fluor Albus: *see* **Leucorrhœa.**

Flushing of Heat: Nux V. (*in the face after meals*); Acon., Bell. (*from excitement*); Cimic., Sep., Apis, Carbo V., Glon., Ign., Croc., Carb.-An., Lach. (*flushes at the climacteric period*); Arn. Flushes should suggest inquiry for irritation of the spine.

See **Menses**: CESSATION OF.

Fœtid Breath: *see* **Breath**: OFFENSIVE.

Fracture: TO PROMOTE ADHESION IN—Ruta, Symph., Calc.-C., Sil.

Freckles: Phos., Graph., Sulph., Ac.-Nit., Sep., Natr.-Mur., Canth. For local use: Powdered Nitre, moistened with water, or Chlorine water, to be applied morning and night.

Fright: EFFECTS OF—Acon. (*palpitation* or *quickened circulation*); Coff. (*extreme nervous irritability*); Opi. (*stupor*); Hyos., Bell. (*brain disturbance, especially in children*); Ign. (*convulsive movements*); Gels. (*affecting bowels or bladder*); Anac., Cham., Nux V., Kali C., Plat., Puls.

Frog: *see* **Aphthæ.**

Frost-bite: Rubbing the part with snow, afterwards with cold water, and avoiding exposure to heat, so as to prevent too sudden reaction. Ferr. Phos.

See also **Chilblain.**

Fungus: *see* **Excrescences.**

Furunculus: *see* **Boil.**

Gall-Stones: Podoph., Merc., Nux V., Elat., Calc.-C.; Chel. ϕ expels and prevents. Berb. ϕ, Acon., Opi. (*during their passage*). Dr. J. H. Clarke advises Pareira Brava ϕ ʒss. in a wineglassful of warm distilled water every half-hour. Sulph. (*to prevent re-formation*). ʒij. to ʒiv. of olive oil facilitates their expulsion. Dr. Richards, of New Jersey, states that Chin. effectually dissolves gall-stones, and prevents their re-formation. He has had many cases extending over some years. This is confirmed by Dr. Thayer, of Boston.

Ganglion: Ruta, Arn., Sil., Calc.-C., Ac.-Benz., Hep.-S., Mez., Phyto. Also (F. 47 and 49) ext.

Gangrene: Ars., Lach., Chin., Carbo Veg., Sec. Ac.-Carbol. int. and ext., or a yeast or carrot poultice. Boracic Acid ointment.

Gastric-Fever: *see* **Enteric-Fever.**

Gastritis: *see* **Stomach**: INFLAMMATION OF.

Gastrodynia *and* **Gastralgia**: Ars. 2x, Bismuth, Nux V., Ac.-Oxal.
See **Stomach**: PAIN IN.

Gathering: *see* **Breast, Whitlow, Boil,** etc.

Giddiness: *see* **Vertigo.**

Gin-Colic: Acon., Merc., Bry.

Glandular Swellings: ACUTE—Bary.-Carb., Bell., Rhus (*hard stony feeling*); Hep.-S., Merc., Sil. (*when suppuration is threatened*). Arum Tri., Ac.-Nit. Hot fomentations or poultices.

CHRONIC—Cist.-Can. (*cervical swellings*), Merc.-Iod., Iod., Calc.-C., Calc.-Phos., Phyto., Hydras., K.-Hyd., Sulph., Bary.-Carb., Arum Tri., Calc.-Iod., Ars., Coni., Phyto. int. and ext. (*hard swellings*); Compress of linen dipped in lotion of K.-Hyd. Frictions with oil for thirty minutes twice daily. Merc.-Iod. 3x, grs. x., Axung. ʒj. M.; for local use.

Glaucoma: K.-Hyd. (*congestion and inflammation of the choroid*); Merc. (*hepatic, uterine, or hæmorrhoidal complications*); Nux. V., Ham., or Collin. (*co-existing hæmorrhoids*); Spig., Bry., Colch. (*rheumatic or arthritic symptoms*); Bell., Spig., Merc., Cham. (*ciliary neuralgia*); Bell., Phos., Sant. Dr. Clifton administered ½ gr. doses of the last named remedy twice daily, and after two months' treatment there was great improvement; less hardness of the eyeball, halo round light or candle much reduced, and vision improved.

Gleet: Cinnabar, Cann., Canth., Ferr., Puls., Nux V., Petrol., Petros., Chin., Sulph. 3x trit., Matico 1x, Thuja, Ac.-Nit., Naphthalin. Dr. J. M. Moore writes: Petrol 2 or 3 has cured, in my hands, many cases of *long standing*. Dr. Clifton has cured several cases by one-drop doses of Matico 1x, twice daily. Injection of Glycerine and Hydras. (F. 14). Infusion of Hydras. (ʒj. to Oj.) as an injection. If the patient be seen immediately on the discovery of the infection an injection of Hydras ϕ, ʒj. to aq. ʒj., will disperse it in less than 48 hours. Not much good unless in very early stage. Dr. Burnett writes: By using an injection of K.-Permang. the gleet gets so bad that the patient thinks his old Gonorrhœa has returned in all its violence: continue these injections for a few days, and a cure results. Sea-bathing.

Glossitis: *see* **Tongue**: INFLAMMATION OF.

Goitre: Spong., Merc.-Iod., Iod., Calc.-C., Ac.-Fluor., Brom., Sulph., Merc.-Biniod. ointment (F. 49) applied to the Goitre, and a hot iron held close to scorch it in.

See also **Glandular Swellings.**

EXOPHTHALMIC—Bell.; Ferr. (*anæmia*); Ars., Chin., Ac.-Phos., Nat.-Mur., Glon.

Gonorrhœa: Cann. ϕ 3 to 5 drops thrice daily, Gels. ϕ (drop-doses), Acon., Merc.-Cor., Canth., Thuja, Copa., Cann.-Sat., Bell., Sulph., Caps., Nux. V., Naphthalin, Nat.-S., Sepia. Injections: Chloride of Zinc (F. 18); Glycerole of Tannin (F. 17); Chloralum. K.-Permang. (F. 16) is said to cure in two or three days. Dr. Burnett adds in a note:—Since I have known this I have thus treated all such cases, and no case has lasted above 10 days. Dr. Clifton states that *Gels.* ϕ, one- or two-drop doses thrice daily, or sometimes alternated with *Merc.-Sol.* 2x trit. (gr. j.), has answered better than anything else in his hands. The following has proved a very effective injection: — Hydrastin ʒj., Majendie's Sol. of Morphia ʒij., Acacia Mucilage ʒiv., used three times daily, the patient having first micturated. Injections of cold water, of Liq. Plumbi (ʒss ad aq. ʒij.), or of Calendula are also recommended. The testicles should be supported by a suspensory bandage.

See also **Gleet, Epididymitis, Chordee,** and **Chancre.**

Gout: Acute—Acon., Bry., Colch., Sab., Dig., Lyc., Arn.; Gels. (*in stomach or bowels with severe cramp*); Ver.-Vir. (*threatened collapse*); *also* Arn., Acon., Led.-Pal., Ac.-Acet., *or* Ol.-Æscul. ext. Bry. ϕ in drop doses promptly relieves pain, so does Colch. ϕ in drop doses. When the larger joints are swollen and painful Ver.-Vir. ϕ as a paint, covered with hot moist lint, and oiled silk over all, expands the skin, and greatly relieves the pain. Nat.-Mur., Ac.-Oxal., Cup.-Met. are also recommended.

Chronic—Puls., Sulph., *or* Led.-Pal. (*rheumatic gout*); Nux V., Bry., Rhod. (*of the upper extremities*), Rhus, K.-Hyd., Staph., Podoph. 1x, in two-grain doses, morning and night, in addition to more closely indicated medicines. Frictions with oil. A course of Friedrichshall and Carlsbad water is also recommended.

Gravel: Lyc., Sarza, Ac.-Phos., Bry., Nux V., Graph., Chin.-Sulph., Ac.-Nit., Ac.-Oxal., Berb., Eup.-Pur.; Lyc. 6, or Coccus Cacti ϕ (*lithic acid deposit, or red stain in vessel*). Dr. Clifton has found the last named remedy in five-drop doses, thrice daily, curative, especially if attended with constipation and flatulence in abdomen, and in cases where *Lyc.* has seemed indicated, but has done only partial good. Milk. Cider.

Green-Sickness: *see* **Chlorosis.**

Grief: *see* **Anxiety.**

Gripes: *see* **Colic.**

Grubs: *see* **Maggot-Pimple.**

Gum-boil: Acon. alt. Bell. (*first symptoms*); Merc.-V., Sil., Hep.-S. (*suppurative stage*); Merc., Phos. (*to prevent recurrence*). Powdered alum, locally.

Gum-rash: Cham., Ant.-C., Puls., Calc.-C.

Gum-scurvy: Merc.-Cor., Ac.-Nit., K.-Chlor., Carbo Veg., Ars., Sulph., Staph. *Also* Ac.-Carbol. wash.

Gumma: Merc.-S., Ac.-Nit., K.-Hyd., Sil., Sulph.

Gutta Serena: *see* **Amaurosis.**

Hæmatemesis: Acon. (*flushed face, full pulse, and in plethoric persons*); Ipec., Gallic Acid (*bright-red blood, with much sickness*); Ham. (*venous blood*); Ham. 1x alt. Acon. 2x, *or* Puls. and hip baths (*vicarious menstruation*); Arn. (*from injury; dark blood*); Ac.-Nit., Acaliph.-In. 5x. The stomach should *rest*, and the patient be fed by the rectum. Beef-tea and cream, essence of meat, etc., form nourishing enemata. Iced-water or lemonade may be sipped.

Hæmoptysis: Ipec., Phos., Ham. (*venous*); Mill. (*arterial*); Acaliph.-In. 5x, Sec., Gallic Ac., Ferr.-Acet., Apoc., Ferr.; Acon. (*plethoric patients*); Ferr.-Sulph. ϕ gr. ss, every ten minutes. When the arterial erethism is great, continue *Acon.* until it abates; better to make some impression on the

muscular walls of the vessels before giving more specific medicines. Arn. (*from injury*). Absolute rest of mind and body. Rest on a mattress with the head and shoulder a little raised. Ice should be swallowed (not sucked) and a bladder of ice placed on the chest.

Hæmorrhage: From the Bladder or Kidneys—Canth., Tereb., Mill., Ham. ϕ. Chim. has been found useful in severe Hæmaturia.

Bowels—Tereb., Ham., Ipec., Cact.-G., Ars., Ver.-Vir., Arn., Ferr.-Phos., Erig.-C. *See also* **Hæmorrhoids and Dysentery.**

Lungs—*see* **Hæmoptysis.**

Nose—*see* **Nose**: Bleeding from.

Stomach—*see* **Hæmatemesis.**

Uterus—Croc. (*dark*); Sabi. (*bright-red*); Sec., Ham., Caul., Ipec., Plat., Trill., Ol. Erig., Apoc. ϕ. *See also* **Labour** *and* **Menstruation.**

Hæmorrhoids: Nux V. alt. Sulph. (*for persons of sedentary habits*); Sulph., Æscul. (*fleshy Piles*); or Nux V. (*constipation*); Collin. (*constipation with uterine difficulties*); Acon. ϕ alt. Ars. or Carbo Veg. (*when inflamed*); Aloes, Collin., or Nux V. (*during pregnancy*); Aur.

Bleeding—Ham. int. and ext.; Trill., Sulph. (*dark blood*); Acon., Aloes (*excessive, bright blood, with much pain*). Caps., Collin., Amm.-Carb., Ac.-Fluor., are also useful remedies.

Chronic—Ars. (*with emaciation*); Ferr., Helon., Ham., *or* Hydras. (*cachectic individuals*); Ac.-Nit., Sulph., Hep.-S. Brown bread, vegetables, fruits. Abdominal compress.

Suppressed—Acon., Puls., Sulph.

In the treatment and prevention of Piles, the use of wooden- or cane-bottomed chairs, instead of soft cushioned seats, is an important adjunct.*

Hair: Falling off of—Canth. int., and ext. in pomade; K.-Carb. (*great dryness of hair*); K.-Carb., Ac.-Nit. (*after nervous fevers*); Ac.-Phos. (*after illness, or from general debility*); Aloes, Ac.-Fluor., Iod., Natr.-Mur., Ars., Calc.-C., Sil., Hep.-S., Phos., Sep., Sulph. (*with chronic headache*). Decoction of box-wood turnings. Frequent shaving the scalp. In tendency to baldness the following points are worth notice:—(1.) Two sets of brushes to be used, washing one set each day, while using the other. (2.) The bristles to be from two to three inches long. (3.) To brush the reverse way, *i.e.*, against the direction of the hair. (4.) The hair to be arranged with the comb only. Hair-wash: Spiritus rect, one part; elder flower water, three parts; but plenty of warm soft water, and warm dry towels to dry the hair thoroughly after washing, are much preferable.—(*W.F.*) The use of a perforated hat is also recommended.

Hands: Chapped—Nat.-Carb., Arn.-, Calend.- *or* Glyc.-cerate, or Glyc. Starch (F. 2); Petrol. 12, int., and Petrol. Soap ext., or Ac.-Sulphs. and Glycerine (F. 12) ext.

See also **Chilblains.**

Coldness of—Acon., Sep., Bary.-Carb., Puls., Nat.-Mur., Sulph.

Cracks in—*see* **Cracks.**

Dryness and Burning of—Phos., Sil., Sang., Lyc., Trill.

Pains in—Bry., Colch., Led.-Pal. *or* Caul. (*rheumatic or gouty*); Rhod. (*neuralgic*); Arn. (*aching from over-use*); Ruta, Puls. Gentle friction with oil.

See **Gout** *and* **Rheumatism.**

* The course of the arterial circulation of the buttocks and thighs appears to be so arranged that when sitting on hard seats the pressure is sustained by the bones; on the contrary, on cushioned seats the weight of the body is chiefly sustained by the soft parts, and, consequently, pressure is made on the blood-vessels; hence soft seats favour the production of piles, as also of uterine disorders, by pressure on the arteries as they emerge from the pelvis, and so tend to drive the blood into the interior of that cavity. This is well demonstrated by Mr. Holden in St. Bartholomew's Hospital Reports, vol. vi., article, *Medical and Surgical Landmarks*,

Perspiration of — Calc.-C., Nat.-Mur., Sulph., Thuja, Ac.-Phos., Ac.-Fluor., Ac.-Picr.

Psoriasis, Roughness, and Redness of—Merc., Petrol., Phyto., Bell., Hep.-S., Graph., Bary.-Carb., Ars., Alum., Juglandin 1x.

Swelling of—Bell. (*with much redness*); Apis (*acute œdema*; Ars., Iod., Chin., Ferr. (*from constitutional debility*); Arg.-Nit., Ferr.-Phos.

Trembling and Weakness of—Phos., Sulph., Anac., Opi., Merc., Nux V., Sil., Arg.-Nit. 2 (*non-mercurial*); Bell., Nux V., Ac.-Nit. (*mercurial*); Agar. 1 (*tremors in fever and delirium tremens*).

Hay-Asthma: Sabad., Ipec., Ac.-Hydroc., K.-Bich.; Euphr., Gels. (*profuse lachrymation*): Ars. (*great debility*); K.-Hyd., Liq.-Pot., Ars. Sniffing salt water into the nostrils twice or thrice daily, as directed for Cold in the head. Injection into eyes and nostrils of *Quinine* (gr. j. ad aq. ʒj.) three or four times daily. The inhalation of *Ac.-Sulphr.* or *Anthoxanth.* is recommended. Swedish movement when the chest is contracted. Also residence by the sea or on a barren common.

Prophylactics—Sabad., Ars., K.-Bich., also sniffing salt water as above.

Headache: Bilious and Sick—Cham. (*in females, from cold or worry*); Iris (*much vomiting of bile*); Bry. (*worse with every movement; vomiting of bitter fluid*); Gels. (*blind headache*); Nux V. (*nervous and sick, with constipation*); Ipec. *intense sickly feeling, with much retching*); Nickel Sulph. (*bi-monthly headache, worst at the root of the nose; nausea and great distress*); Ver.-Alb. (*pain in eyeball, coldness of the skin, and prostration*); Acon. (*followed by vomiting of bile or from cold: see under* Cham.); Sulph. 12, Cimic., Lach. (*at the critical age*); Cimic. (*pains in eyeballs*); Calc.-C., Acet., Cocc., Merc., Puls., Sep., Stann. (*attaining a climax and then decreasing*). In many cases of nervous "sick headache" Dr. Dalzell finds a dose of *Nux V.* 2x every two hours for two or three times, followed by *Bell.* at like intervals, shortens the attacks.

Catarrhal—Acon. (*chills and flushes of heat, throbbing temples*); Euphr., Gels. (*profuse lachrymation*); Bry., Merc.-S. (*in rheumatic patients*); Merc., Nux V., Cimic.

Congestive—Bell. (*redness of the face, throbbing of arteries, and sensitiveness to noise, light, etc.*); Cocc. (*flushed face and nausea*); Cimic. (*pulsative*); Bry. (*frontal, with giddiness, inclination to vomit, and torpor of the bowels*); Acon., *or* Ver.-Vir. (*with plethora*); Nux V. (*pain at the back of the head, with irregular action of the bowels*); Helleb. (*at night, in occiput and nape of neck*); Sulph.-Quin. (*periodic*); Glon. (*more in the morning, with excessive throbbing*); Gels., Cact. (*aching in eyeballs, and giddiness*); Sang. (*frontal, in females*), Leptand., Phell., Chel., Sang., Æthus. Hot fomentations.

Nervous—Ign. (*monthly or fortnightly; weight at the back of the head; sense as if a nail were driven into the skull*); Solanum (*ache confined to one spot, as if nail were driven in*): Nux V. (*in persons of sedentary habits, who study much*); Bell. (*see indications above*); Coff. (*with sleeplessness*); Gels. (*with giddiness*); Sulph.-Quin. 2x (*periodic*); Ars. (*periodic, in forehead and orbits*); Hell. (*stunning, stupefying*); Phos. (*when the eyes are implicated*); Chin., Ac.-Phos., Ferr. (*from debilitating losses*); Cham., Spig., Coloc., Sep., Cimic., Kali Carb. Inhalation of Nitrite of Amyl; Sitz baths, tepid or cold, still or running, for shorter or longer periods (*Dr. Johnson*).

Rheumatic—Acon., Bry., Cimic., Ac.-Nit., Rhus, Spig., Phyto. Lamp vapour, or Turkish baths; quick exercise to promote perspiration daily.

Chronic and Obstinate—Arg.-Nit., Calc.-C., Phos., Plat., Plumb., Sil., Stan., Zinc., Sep.

From Heart-Disease—Cact., Lilium Tig., Acon., Dig., Gels., Bell.

From Mental Causes, Over-Study, Anxiety, etc.—Nux V., Aur., Phos., Ac.-Phos., Anac., Cimic., Gels., Ign., Sil., Calc.-C., Aloes.

Hearing: HARDNESS—*see* **Deafness.**

MORBIDLY SENSITIVE—Ign., Nux V., Cann.-Ind., Cup.-M., Coff., Bell., Aur., Chin., Cham.

Heart: CONGESTION OF—Acon., Cact., Ver.-Vir., Asaf., Opi., Puls., Sulph.

DISEASE OF—Dig. (*slow, or quickened and feeble, irregular, and intermittent pulse; dilatation*); Chlor.-Hyd., grs. v. (*in similar cases to Dig.*); Cact. (*sensation as if the heart were grasped firmly*); Acon. (*violent palpitation, as in Hypertrophy*); Lilium Tig. (*with uterine disorder*); Spig. ϕ (*stabbing pain*); Ver.-Vir. (*cardiac debility, with diarrhœa, faintness and collapse*); Arn. (*induced by over-exertion*); Collin. (*with dyspepsia or portal congestion*); Phos., Ac.-Phos., Cact., Calc.-C. (*fatty degeneration*), Ars. (*great debility, dyspnœa, dropsy, etc.*); Apis. (*threatened dropsy*); Camph., Mosch. (*for various paroxysmal sufferings*); Naja, Lach.

INFLAMMATION OF, AND ITS MEMBRANES—Acon. alt. Spig., Cimic., Aur. (*violent action of the heart; rheumatic peri- and endo-carditis*); Acon., Bry., Asclep.-Tub. (*pericarditis*); Bry. (*rheumatic patients, and when serous effusion is threatened*); Colch., Apis. (*gouty patients*); Ars. (*great debility, dropsy*); Hot linseed-meal poultices, frequently renewed.

PALPITATION OF—Acon. (*from excitement and organic disease*); Mosch. *or* Camph. (*simple nervous*); Ign. (*from grief*); Coff. (*from joy, with wakefulness*); Cham. (*in children and females, from worry or anger*); Opi., Ver.-Vir. (*from fright, etc., with fluttering, dyspnœa, etc.*); Bell. (*pulsation extending to the head*); Chin., Ac.-Phos., Ver.-Vir., Ferr. (*from debility*); Nux V., Gels. (*from spinal irritation*); Naja (*great dread, depression of spirits, pain in head*), Ver.-Alb. (*from flatulence*); Cact., Spig., Gels., Dig., Puls., Iod., Hyper., Ambra, Agar., Baryta-Carb., Lith.-C., Iberis, have been found useful. Cold compress over heart.

See also **Angina Pectoris, Dyspnœa,** etc.

Heartburn: Puls. ϕ, Bismuth 3x trit., Iris, Bry., Caps. ϕ, Nux V.; Ver.-Alb. 1x; Carbo Veg. 12, Calc.-C. 12–30, Arg.-Nit., Lyc., Rob. (*with chronic acidity*); Lemon-juice, aërated bread, plain biscuits, etc., but new bread, too much vegetable food, and pastry should be avoided.

Heat-Spots: *see* **Eczema**: SIMPLE.

Hectic-Fever: Chin., Ac.-Phos., Gels. Phos., Ars., Hep.-S., Sil., Sulph., Bapt.

Helminthiasis: Cin., Sant., Merc., Urt.-U., Teuc., Ign., Chin., Ferr., Ant.-C. Mr. Nankivell advises Cin., Ign. and Chin. to be given in mother tincture, and the Sant. in powder, 1-gr. doses.

See also **Worms.**

Hemicrania: Bell., Nux V., Cimic. 1x, Hep.-S., Ign., Coff., Puls., Aur., Ars., Chelid., Calc.-C.

See also **Headache**: NERVOUS.

Hemiplegia: Bary.-Carb., Nux V., Lyc. (*right side*); Rhus (*creeping numbness in left arm and leg*); Arn., Cocc., Caust., Aur.-Met., Secale.

See **Paralysis.**

Hepatitis: *see* **Liver**: INFLAMMATION OF.

Hernia: ACUTE PAIN FROM—Acon. alt. Nux V., Bell. ϕ; Calc.-C., Silic. (*in children*); Æsculus. To reduce, relax the muscles which surround the openings, and gently push back the tumour; it may be necessary to place the patient on an inclined board so that the hips are much higher than the head. A very copious enema has proved useful. A proper truss should be worn.

Herpes: Acon. (*fever, neuralgia, etc.*); Rhus, Sep. (*simple cases*); Ars. alt. Merc. (*with neuralgia and debility*); Phyto., Iris., Graph. (*ulcerous*); Phos. (*in phthisical constitutions*); Ran.-Bulb. (*pleurodynia*); Graph., Nux Juglans (*chronic*).

Circinnatus—Tellur., Iris, Sep., Ac.-Nit. As H. Circin. is a parasitic disease, only such external remedies as will destroy the parasite are required, as pure Sulphurous Acid, Unguentum Hydrarg. Nit. (B.P.), or Oleate of Mercury. (*Dr. D. D. Brown.*)

See also **Ringworm.**

Zoster—Rhus, Ran.-Bulb., Cist., Can.; Ars.; Canth. Lot. (*for itching*); Mezer.

Hiccough: Nux V. (*simple spasm, and in hard drinkers*); Ac.-Sulph., Rob. (*acid eructations*); Acon., Ars., Bell., Ver.-Vir., Gels., Hyos. (*in brain affections*); Mosch., Cy. clam., Cic.-V. Nat.-Mur., Ac.-Hydroc., Chlor.-Hyd., in five-grain doses, in solution, is palliative and often curative, where other treatment is unsuccessful. A few drops of Nitric Ether on sugar.

Hip-Joint Disease: * Acon. (*fever*); Coloc., Rhus, Bell. alt. Merc.-S. (*pain*); Cimic., Sil., Calc.-Phos., Calc.-C., Ferr.-Iod., Hep.-S., Stram., Ac.-Phos., Chin., Kali Carb., Arg.-Met. Immediate and perfect rest.

Hoarseness: *see* **Voice:** Hoarse.

Hooping-Cough: Acon. (*at commencement*); Ipec. (*with gastric symptoms, vomiting of mucus, sometimes hæmorrhage*); Dros. (*severe paroxysms of hoarse cough, even with hæmorrhage and vomiting*); Cup.-Acet. 1 trit, (*croup-like cough, with convulsive movements; threatened death from collapse of air-cells of the lungs* †); Zinc.-Sulph. 1-12th gr.; Bell. (*sudden and violent paroxysms, with sore throat, brain symptoms, worse at night*); Petrol. 1x (*great sickness—also* Ipec.); Phos. (*lung complication*); Cina. (*worm symptoms*); Coral., Ver.-Alb., Gels. alt. Ver.-Vir., Nux V., Chlor.-Hyd., Ac.-Carbol. 1x, Ant.-T., Cpi., Ac.-Hydroc., Cocc.-C., Caps., Kali Carb., Hep.-S.

Hordeolum: *see* **Eyelid:** Stye on.

Housemaid's Knee: Sil.; Puls., *or* Puls. and Lyc. alt. Rest from kneeling is an important element in the treatment. Dr. Clifton, however, informs us that he has seen *Sil.* fail to do any good in the only two cases in which he tried it. *Rhus T.*, int. and ext., generally cures. He has also cured capped hocks in horses with *Rhus*, this disease being analogous to housemaid's knee. The late Mr. Freeman had cured several cases with *Arn.* Other useful remedies are—Apis, Sticta, Kali Iod. Locally a lotion of Kali Iod. (5 grs. to the ounce).

Hunger-Pest: *see* **Relapsing Fever.**

Hydrocele: *see* **Dropsy:** Local.

Hydrophobia: Bell. Stram., Scutel. The likeliest remedies to prevent the development of the poison; one of them should be administered in a low dilution directly after infection, and the patient kept under its influence for some time. The actual cautery promptly applied is the best preventive. A common iron skewer will serve the purpose, and chloroform may be used, if necessary, but not if time must be lost to procure it.

Hydrocephalus: *see* **Brain:** Inflammation of, and Dropsy of.

Hydrothorax: *see* **Chest:** Dropsy of.

Hypochondriasis: Aur., Nux V., Staph., Anac. (*chiefly in males*); Cimic., Ign., Sep., Petrol., Plat. (*chiefly in uterine derangements, especially at the change of life*); Ars., Arg.-Met., Lyc., Sulph., Nat. Mur., Hyos., Coni., Stann. Sharp discipline, change of air, scene, and treatment

* An important element in the diagnosis of this disease is furnished by a comparative examination of the nates. In health they are firm and globular, from a large accumulation of fat over the great muscle of each buttock. Wasting of one is an early symptom of hip-joint disease.

† In this condition Dr. Dalzell recommends friction over the chest and back with a cold wet towel every two or three hours, for from three to five minutes at a time.

Hysteria: Mosch. (*with tendency to fainting, headache, constriction of the chest, and general chilliness*); Ign., Puls., Gels., Cimic., Plat., Cocc., Asaf., Caul., Zinc.-Val., Hyos., Bell., Nux Mosch., Valer.

Hysteric Convulsions *or* **Fits**: Camph. *or* Mosch. int. or by olfaction; Acon., Opi. (*if caused by fright*); Cup.-Acet.; Cold douche to the face.

Icthyosis: Fowler's Solution of Ars.-Phos. int. and ext., Iod., Aur.-Hydrocot. Friction with *Oleum theobromæ* or Cocoa butter. Warm fomentation and friction with cod-liver oil. Tonics. Cleanliness.

Impetigo: Viola Tric., Ant.-T., Hep.-S., Ant.-C., K.-Bich., Clem., Cicuta, Calc.-Mur., Ars., Ac.-Carbol. and Glycerine ext. (F. 32).

See also **Eruptions.**

Impotence: Phos., Coni., Dig., Chin., Ac.-Phos., Nux V., Ferr., Bary.-Carb., Agnus, Nuph., Sulph.; Iod. (*atrophy of the testicles*); Caladium (*with coldness of the organs*); Arn. (*from an injury*); Hyperic. (*from injury to the spine*); Kali Brom., Selen.

Incontinence of Urine: *see* **Urine.**

Indigestion: *see* **Dyspepsia.**

Influenza: Acon. *or* Gels. (*at first*); Bapt., Gels. (*first and second stages*); Ars., K.-Hyd. (*second and later stages*); Eup.-Perf. (*bone pains*); K.-Bich. (*troublesome cough*); Sulph. *or* Phos. (*tedious cases, with chest symptoms*): Rhus, Caust. Olfaction of Iod., Ars., Puls. Phos. on first appearance, will stop it at once.

Insolation: *see* **Sun-stroke.**

Intermittent Fever: *see* **Ague.**

Intertrigo: *see* **Excoriation.**

Intoxication: Nux V., Strych.

See also **Delirium Tremens.**

Iritis: Arn. (*traumatic*); Bry., Gels., Merc.-Cor., Bell., *or* Acon. ϕ (*rheumatic*). Excellent results in rheumatic Iritis from daily use of Russian vapour baths; the poison is taken out of the system, and therefore ceases to inflame the eye. Cinn., Merc., Clem., Ars., Kali.-B., Merc.-Iod., K.-Hyd. (*grain doses*), Aur. (*syphilitic*). An essential part of the treatment, along with internal remedies, is the local use of Atropia, to keep the pupil dilated. The best strength is one half that of the Liquor Atropiæ Sulphas (B.B.).

See also **Eyes**: INFLAMMATION OF.

Irritation: *see* **Itching.**

Itch: *see* **Scabies.**

Itching of the Skin: Acon. (*great itching, with feverishness*); Sulph., Aur., Petrol. (*with dry harsh skin, worse in bed or in warmth*—Rhus Rad.); Ars. (*burning-itching with debility*); Ign. (*fine pricking-itching*); Rumex (*worse in bed*); Rhus, Crot.-Tig., Nux V., Arg.-Nit., Mez., Merc., Iod., Alum., Ac.-Sulph., Morph., Ac.-Nit., Ambra, Kreas., Ac.-Carbol., Graph., Collin., Calad., Cocc. Cact., Berberis., Led., Pal. Cold compresses are recommended. Inunction with Camphor liniment (F. 25).

OF THE SEAT: *see* **Anus**: ITCHING OF.

Jaundice: ACUTE—Acon., Merc., Chin. 2x alt. Merc.-S. 3x, Nux V.; Cham. (*from anger*); Kali.-Sulph. (*simple catarrh*).

CHRONIC—Phos., Leptand., Chel., Iod., Crotal. H., Podoph., Hydras. alt. Nux V., Dig., Ars., Ac.-Nitro-Muriat. 1x; Chin. (*from miasm; also in children*); Hep.-S. *or* Ac.-Nit. (*from* Mercury); Merc. (*from* Bark *or* Quinine). In Chronic Jaundice, when everything else has failed, I have never known the Barberry root to deceive me. An old nurse recommended it to me more than thirty years ago. Take an ounce of the *inner* bark of the Barberry root, dry, and coarsely powder it. Then boil with a pint to a pint and a half of stale beer, strain when cold, and take a teacupful *four* hours before a meal every morning. The most inveterate cases have yielded to this in three or four days (*Dr. Holland*).

MALIGNANT—Phos., Ars.

Jaw: Caries or Necrosis of—Phos., Sil., Ac.-Phos., Aur.-Mur., Thuja, Plumb. Acet., Rhus T.

Spasm of—*see* **Tetanus.**

Pains in—Acon.; Merc., Cimic., Bell. (*with rigidity*); Spig. (*neuralgic or rheumatic*); Petrol. (*as though dislocated*). Arum Tri.

Joints: Aching and Stiffness of—Arn. (*from exertion*); Rhus (*from a strain*); Bry., Rhus, Phyto. (*rheumatic*); Ruta, Caust., Arg.-Met., Nux V., Petrol., Macrot. Also frictions with oil.

Dropsy of—Iod., Bry., K.-Hyd., Canth.

Inflammation of (*Synovitis*)—Acon. (*febrile symptoms*); Bry. (*rheumatic patients*); Led.-Pal. (*with constant chilliness*); Merc.-Prot.-Iod. 3x (*chronic and painful*); Puls. (*females and children*); Sil., Hep.-S. (*suppuration*); Merc. (*chronic cases*); Phyto. int. and ext. (*strumous*); K.-Hyd. (*syphilitic*); Berb., Ac.-Benz., Iod. Hot fomentation or hot poultices in the acute form; in the chronic, cold compresses are better than hot applications, which, even if they do good at first, must not be continued too long.

Rheumatism of—*see* **Rheumatism.**

Stiffness of—Inunction with cod-liver oil or olive oil morning and night for about five or ten minutes often effects great improvement, after painting *Iodine*, blisters, and other measures have been ineffectual.

Swelling of — Sil., Calc.-Phos. ("*white-swelling*"); Merc., Hep.-S., Puls., Bell.; Ac.-Phos., Sulph., *and* Calc.-C. (*as constitutional remedies*). Alternate bathing with hot and cold water.

Weakness in — Calc.-C., Ruta, Caust., K.-Carb., Merc., Lyc., Sulph.

See also **Gout, Rheumatism,** etc.

Joy: Effects of Excessive—Coff., Puls.

Kidneys: Congestion of—Tereb. 3x, Bell.

Inflammation of — Acon., Gels., Bell. (*fever*); Tereb. (*suppressed, or scanty, smoky, thick, fœtid, or even bloody urine*); Erigeron (*with copious albuminous discharge*); Canth., Ars. (*desquamative*); Plumb. (*granular degeneration*); Ars., Apoc., Apis, Hep.-S. (*post-scarlatinal nephritis, with scanty, albuminous, or suppressed urine, debility, dropsy, etc.*): Cann., Apis, Chelid., Ferr., Nux V., Puls., Ac.-Benz., Zinc. (*pains in the kidneys*).

See also **Bright's Disease.**

Knee: Inflammation in—Acon. alt. Puls.; Rhus, Bry., Sulph.
Enlargement of—Silicate of Lime.

See also **Joints.**

Labour: To promote Normal—Arn., Cimic., Caul., Puls.; Gels. (*taken some weeks before*).

False-Pains — Puls., Cham., Sec., Nux V. *See also* **Miscarriage.**

Abnormal Conditions of—Gels.,* Bell., *or* Caul. (*rigidity of the os uteri*); Chin. (*intermittent pains*); Croc., Puls. (*irregular*); Cham., Gels., Coff. (*excessive*); Ign., Ac.-Hydroc., Bell., *or* Hyos., Chloroform inhaled (*convulsions and delirium*); Cocc., Nux V. (*spasms, etc.*); Puls., Sec. ϕ, Cimic. ϕ, Caul. 1x, three or four grains repeated as often as required (*pains ceasing, or too weak*); Cocc., Caul. (*paralysis*).

Retained Placenta—Arn., Puls., Sec., Ign., Croc. 1x.

After-Pains—Arn., Cimic., Ign., Caul., Sec. (high dil.), Cham., Coff., Puls., Bell., Actæa ϕ.

Hæmorrhage during or after—Sec., Sabi., Ipec., Eryng., Arn,, Puls., Ign., Cimic.; Nux Mosch. (*slight flow lasting several weeks*), Chin. *or* Ferr. (*for consequent debility*). Also injections of cool or cold water.

See also **Menstruation**: Profuse.

* Dr. Douglas remarks:—"No remedy can at all be compared with *Gels.* ϕ, one to five drops every thirty minutes, to produce relaxation of a rigid, unyielding *os uteri*." "This remark of Dr. Douglas," writes Dr. Newton, "I cordially substantiate."

Retention of Urine after—Acon., Bell., Canth., Hyos., Rhus. The catheter may be necessary.

Constipation after—Collin.; Verat. Alb., Bry., Opi., Lyc., *or* Plumb.; *or* enema of tepid water. Dr. Ussher writes, "Plumb. 12 always acts to my satisfaction."

See **Constipation**; *also* **Hæmorrhoids.**

Diarrhœa—Puls., China, Hyos.

Lochia, Abnormal—Acon. (*too profuse and bright-red, in plethoric patients*); Croc. 2x (*dark red colour*); Bell., Cimic. (*scanty*); Ver.-Vir. (*scanty, with headache*); Kreas., Carbo An., *or* Sec. (*offensive*); Kreas. (*intermittent*); Sabi., Cimic. (*continuing red too long*); Caul., Chin., *or* Calc.-C. (*too prolonged*); Acon. (*suppressed*); Hydras. (*offensive, with suppressed or scanty urine*). Warm water lavement of vagina.

Puerperal-Fever—Acon. alt. Bell. *or* Ver.-Vir. (*brain symptoms*); Bry. *or* Merc. alt. Acon. (*Peritonitis*); Coloc., Tereb. (*much Tympanitis*); Hyos., Bapt., Ars., *or* Lach. (*very bad cases*). Repeated fomentations and lavement of vagina are valuable. Hot injections of Condy's Fluid solution are also recommended. There would be fewer cases of this fever if the parts were sponged with hot water four times a day.

Puerperal Mania—Hyos., Opi., K.-Brom., Stram., Cann.-Ind.; Cimic., Plat., Aur., Ars., Bapt. (*melancholy*).

Lactation: Fever—Acon. *or* Bell., alt. Bry.

Abnormal Conditions of — Acon., Agnus C., Asaf., Puls., Coni., Calc.-C. (*absent, late, or scanty*). Also gruel as drink, and Syrup Lacto-Phosphate of Lime; Calc.-C., Sulph., Sil., Merc. (*deteriorated*); Nux V. (*from use of spirits*); Cham. (*from anger*); Calc.-C., K.-Hyd., Bry., Phos., Sil., Iod. (*excessive or too long-continued flow*); China (*consequent debility*); Cimic. (*mental dulness and melancholy*); Calc.-C., Iod., Asaf., Sulph., Chin., Ac.-Phos. (*menses occurring during lactation*). Under this last condition, the child should be weaned.

See also **Breast, Nipples,** etc.

Laryngismus Stridulus: *see* **Croup**: Spasmodic.

Laryngitis: Acute—Acon. alt. Spong., Hep.-S., *or* K.-Bich.; Ammon.-Brom., Apis (*œdema of the glottis*). Foment the larynx externally, and steam internally. Laryngotomy is sometimes necessary.

Chronic—Spong., K.-Bich., Hep.-S., Caust., Carbo Veg., Selen.; Ant.-Tart., Merc.-Bin.-Iod. *or* Ac.-Nit. (*syphilitic*). Inhalation of *Iod.*

Larynx: Painful Irritation of, causing frequent hard cough—Chlorine vapour, Ac.-Sulphs. Spray, or inhalation of vapour from a bottle of the Acid after removing the stopper.

Lead-Colic: Plat., Opi., Alum., Bell., Ac.-Sulph.

Legs: Cramps in—Ver.-Vir., Camph., Nux V., Cup., Cham., Calc.-C., Sulph. 3, Arn., Colch.

Paralysis of—Cocc., Rhus, Coni., Phos. 1x, Bell., Nux V., Ac.-Oxal., Ac.-Picric. Electricity.

Swelling of—*see* **Dropsy.**

Ulcers on—Bell. (*erysipelatous*); K.-Bich. (*chronic*); Merc.-S. (*eczematous*); Phos. (*debilitated patients*); Ham., Puls., Sil., Ac.-Nit., Ac.-Fluor., Ac.-Phos. (*varicose*). Ars. 3x (*chronic cases with general loss of health, also locally when the ulcer is indolent* ʒss—ʒj, Aquæ ʒvi—ʒviij). When ulcers are attended with much surrounding inflammation, the local application of cabbage-leaves is very beneficial. Posture is important.

See also **Veins**: Varicose.

Weakness of—Rhus Rad., Arg.-Nit., Nux V.; Phos., Sulph., Bell. (*trembling*). Electricity.

White-Leg; *see* **Phlegmasia Alba Dolens.**

Lepra and **Leprosis**: *see* **Psoriasis.**

Leprosy: Ars., Ant.-C., Merc., K.-Hyd., Hydrocotyle Asiatica.

Leucoma (*white speck on the cornea*): Bell., Cann., Calc.-C., Euphr., Sil., Puls., Phos., Coni., K.-Hyd. 3x, Sulph.

Leucorrhœa: Puls., Helon., Sep., Sab., Kreas., Ac.-Nit. (*corrosive or excoriative*); Copa., Nat.-Mur., Iod., Senec., Chin. ϕ alt. Sep. (*yellow-white*); Kali.-Sulph. (*yellow, thick*); Ferr.-Pernit.-Tr. (*fœtid, with prolapsus*); Ferr., Ars., Nux, Merc., Collin., Aloes, Xanth., Hydras., Caul. alt. Cimic., Kreas., Coni.; Calc. *or* Iod. (*in scrofulous females; also in children*); Mag.-Mur., Alumina, Sulph. Frequent local ablutions: injections of Hydrastis, Chloralum, etc. Cold sitz baths. For children, injections of Calend. lotion. Sea bathing.

Lichen: Sulph., Ant.-C., Petrol., Ars.-Iod., Ars., Nux Jug.; Apis *or* Led.-Pal. ("*prickly-heat*"). Also the use of Petrol.-soap. Dr. J. H. Clarke recommends Barilla-soap.

Lienteria: Chin., Ferr., Phos., Ac.-Phos., Puls.

Lips: Soreness, Cracks, etc., of—Merc., Graph., Sulph.; Calend.-cerate, Ac.-Sulphˢ., Nat.-Mur., Condurango, Hep.-S., Rhus, Ars., Hydras., and Glyc. (F. 6).

Liver: Abscess of — Acon., Merc., Hep.-S.; evacuation by the aspirator.

Congestion and Chronic Enlargement of — Liver-Complaint—Merc., Leptand., Merc.-Iod., Bry., Phos., Ac.-Nit., Agar., Nux V., Sulph., Podoph., Chel., Agar., Carbo Veg., Lyc., Ars.; Chin. *or* Sulph.-Quin. (*consequent on Ague*); K.-Brom., Iod. 2x. Hot fomentations every night for twenty minutes, followed by the abdominal compress, are valuable auxiliaries.

See also **Biliousness**, etc.

Hob-Nailed—*see* **Cirrhosis.**

Hydatid Cysts of — K.-Brom. in large doses is said to kill the echinococci.

Inflammation of—Acon. alt. Bry. *or* Merc.-Cor., Hep.-S. (*threatened abscess*). Hot fomentations.

Liver-Spots: Sulph., Sep., Borax, Lyc.

Lochia: Abnormal—*see under* **Labour.**

Lock-Jaw: *see* **Tetanus.**

Locomotor Ataxy: Bell., Atropine 3 trit., Ars., Secale, Kali Iod., Phos., Nux V., Ac.-Picric., Ac.-Fluor., Arg.-Nit., Alumen, Lyc., Ign.

Low-Fever: *see* **Enteric-Fever.**

Lumbago: Acon. (*recent*); Rhus Rad. (*pains worse during rest and at night; from a cold; chronic*); Arn. (*from severe exertion*); Cimic. ϕ or 1x (*muscular pains*); Macrotin, Sec., Colch., Dulc., Berb., Rhod., Ac.-Picric., Ant.-T.; Acon., Arn., *or* Rhus liniments (F. 22, 26), rubbed in before a fire, or medicated compresses, are very useful. Dr. Brown says no application equals that of the hot iron. *See* **Chest**: pains in. A skein of silk worn round the waist is an excellent preventive, as I can testify from personal experience (*Dr. Holland*).

See also **Crick-in-the-Back.**

Lungs: Abscess in—Acon., Iod., Ars., Caps., Bell., Chin., Sil., Hep.-S. Lad, aged 10, had chronic Abscess in lungs, with extremely fœtid sputa—seemed dying. *Ars.* 2, ter die, soon produced great and permanent improvement, and to a cursory observer, after five years, looks quite well (*W.F.*).

Congestion of — Phos. 3x or 3; Acon. 1x, K.-Bich., Ver.-Vir. 1x (*from chill*); Ars. (*cardiac complications*); Bell., Ant.-T., Ver.-Vir. (*from cold*); Ars.-Iod., Carbo V.

Consumption of—*see* **Phthisis Pulmonalis.**

Gangrene of—Ars., Chin., Lach., Crotal. H., Carbo V., Caps.

Hæmorrhage from—Acon., Phos., Ham., Kreas., Ipec., Ferr., Ferri.-Sulph. ϕ gr.ss. every ten minutes, Cact., Mill.; Arn. (*if from injury*); Bry. (*vicarious of menstruation*). Inhalation of Perchloride of Iron Spray.

Inflammation of—Acon. alt. Phos. *or* Bry.; Ant.-T. 1 to 3 trit. (*broncho-pneumonia, and in children*); Sulph. ϕ, Chelid.

See **Pneumonia.**

Paralysis of—Phos., Opi., Ant.-T., Bary.-Carb., Lach.

Lupus: Ars., K.-Bich., Phyto., Sulph., Calc.-C., Merc., Iod., *or* Hydras., int. and ext.; Marsden's Arsenical Mucilage, Syr. Ferri-Iod., int. and ext. Aur.-Mur., Hydrocotyle, int. and ext., are also recommended.

Lymphatic Glands: Enlarged—Merc.-Iod., Bary.-Carb., Dulc., Bell., Aur.-Mur., Coni.; Bary.-Mur., Rhus (*indurated*); Sulph., Sil., Calc.-C., *or* Iod. (*as constitutional remedies*). Frictions with oil. Compresses dipped in, and lotions of, K.-Hyd.

Maggot-Pimple: Bary.-Carb., Ac.. Phos., Calc.-C.

Mammary Abscess; *see* **Breast.**

Mania: Puerperal—*see* **Puerperal Mania.**

Mania: Threatened—Actæa; Ver.-Vir (*religious delusions*).

Masturbation: *see* **Spermatorrhœa.**

Measles: Acon. (*fever*) alt. Puls.; Euphr. (*lachrymation and coryza*); Bry., Ant.-T., Hep.-S., K.-Bich. (*laryngeal cough*); Cup. (*metallic cough*); Dros. (*cough not metallic*); Gels., Bry., Ammon.-Carb. (*when the eruption does not come out well*), also hot blanket-pack: Bell. (*sore throat, brain symptoms*); Euphr., Staph. (*nasal catarrh*); Ver.-Vir. (*congestion of the lungs, nausea, etc.*); Merc. (*glandular swellings*); Phos. (*chest symptoms*): Ammon.-Carb. (*malignant*); Cup.-Acet. 6, Sulph. (*deficient eruption, intense headache, and tendency to coma; also during convalescence to prevent sequelæ*). Inunction with oil morning and night. Additional remedies are Rhus. T., Camph., Ars., Iod., and Opi.

False (*Roseola*)—Acon. int. and ext.; Rhus, Bell.

Prophylactic—Puls., Bell.

Megrim: *see* **Hemicrania.**

Melancholia: *see* **Hypochondriasis.**

Memory: Weakness *or* Loss of—Dig., Rhod., Camph., Cocc. I., Bary.-C., Ac.-Phos., Anac., Zinc., Alum., Aur., Ign., Verat., Sulph.

Meningitis: Simple—Acon. alt. Bell. Bry.

Syphilitic—Merc., K.-Hyd.

Traumatic—Acon. 1x alt. Arn. 1x.

Tubercular * — Bell.; Hell. alt. Calc.-Phos. (*when effusion has taken place*); Glon. 3 alt. Iod. 1, Calc.-C., Sulph.; Ver.-Vir., to nape of neck. Dr. Ockford states that *Apis* and *Cup.-M.* have appeared to do more in this disease than any other medicine.

Menopausia: *see* **Menstruation:** Cessation of.

Menorrhagia: *see* **Menstruation:** Profuse.

Menstruation: Delay of the First—Puls., Ferr., Sep., Cycla., Graph., Sulph., Phos.; Acon. (*disturbed circulation*); Nat.-Mur., Mag. C., Senec. See Sitz-bath, under **Menstruation:** Scanty.

Membranous—Borax grs. v. ter die (*profuse discharge at one time and scanty at another, with severe labour-like pains in the back, hips, and hypogastric region*).

Painful — Sec. (*expulsive, forcing pain, with dark, coagulated, or scanty discharge*); Collin. (*piles, constipation, etc.*); Senec. (*scanty or profuse flow*); Gels. ϕ *or* Caul. (*spasmodic pains*); Cimic. (*rheumatic patients*); Cham., Coff., *or* Xanth. (*neuralgic pains*): Cocc.

* A professional correspondent informs us of the successful treatment of, what he believes was, a case of this almost incurable malady in an infant of six months old, in whom effusion had taken place before he was called in. *Helleb.* 3x alt. *Calc.-Phos.* 3x, with an occasional dose of *Sulph.* 12, were the remedies. The constitutional symptoms gradually declined, and the patient recovered. Our correspondent, however, furnishes no proof that the case was one of tubercular meningitis.

(*colicky pain*); Ham. (*ovarian irritation*); Bell., Acon., Ign., Plat., Sabi., Viburnum Opulus; Macrot. 3x *or* Cimic. 2x for a fortnight before the period (*habitually painful*): Cact., Borax, Mag.-C. "K.-Hyd. and K.-Brom. at the intervals of the periods, and Senec. ϕ or Gels. ϕ at the periods, I have found most reliable in violent cases" (*Dr. Moore*). Dr. Maffey has found benefit from painting the spine with Acetic Acid morning and night. During the intervals care should be used to remove the acid by means of a wet sponge if it causes smarting, and cease the application for that day. The pain produced by the acid does harm. Dr. Dalzell says, "Chapman's spinal *ice* bag I have found very useful in some cases of *Dysmenorrhœa*, with *scanty* and tardy discharge, using it half an hour once or twice a day when this pain comes on, while in the opposite condition (*i.e.*, where there is a tendency to *Menorrhagia*), I have found the *hot water* spinal (4 inch) bag very useful, when applied in the lumbar region, as Dr. Chapman directs, for half an hour at a time, and repeated as required." During the interval sponge the bowels and lower part of back with water at 100° three minutes, with cold water one minute, morning and night. Sitz-baths are also very useful, either hot or cold, or cold alone. Local packing. Shower and needle baths. Pail douches. Wash down (*Dr. W. Johnson*).

Irregular *or* Infrequent — Chin. (*when profuse and consisting of dark lumps*); Puls., Cycla. (*scanty*); Iod. *or* Phos. (*gradually diminishing*); Sep., Nux V., Bell., Sulph., Senec. Dr. Moore recommends *Podoph.* and *Puls.*, in alternation, for infrequent and retarded menstruation in bilious patients and those subject to constipation.

Scanty—Puls. (*simple cases*); Ferr., Helon. (*with anæmia*); Bell. *or* Acon. (*in full-blooded patients*); Merc. (*sallow complexion, liquefaction of the blood, liver derangement, etc.*); Arg.-Nit. (*watery discharge*); Graph. (*constipation, and unhealthy skin*); Sep. (*chlorotic appearance, leucorrhœa, etc.*); Phos. (*constitutional delicacy; chronic diarrhœa; tendency to chest-disease*); K.-Carb., Dulc., Sulph., Cycla., Plat., Nat.-Mur., Bary.-Carb., Mag.-C., Senec. A sitz-bath (58°—60°) from 5 to 15 minutes at bed-time; legs, feet, and shoulders to be warmly covered; after bath, the patient to be well rubbed till warm, then instantly retire to bed: excellent for Amenorrhœa and other *functional* disorders.

Excessive—Sec. (*dark or foul discharge, in lumps, with severe pains previous to their expulsion*); Croc. (*dark and clotted, especially in patients with dim sight*): Sab. (*bright-red, with pain chiefly at first*); Calc.-C. (*too early*); Acon. *or* Bell. (*in plethoric patients*); Bell. and Calc.-C., in varied dilutions between the periods; Ham. (*profuse venous*); Ipec. (*simple profuse bright-red discharge, with or without nausea*); Hyos. (*nervous and hysteric patients*); Phos. (*mental and sexual excitement, sensitiveness, etc.*); Chin. (*after excessive discharges*); Senec., Ferr., Iod., Borax, Aloes, Croc., Mag.-C., Ac.-Nit., Ars., Ambra, Gum Arabic, powdered with a little Camphor, and applied on lint, stops the hæmorrhage. Cold shower, sponge, and sitz-baths, except there be debility, anæmia, or constitutional disease. The cold sitz-bath is specially valuable; the water should be sufficient to cover the pelvis, while the feet and legs should be covered with hot flannel, or immersed in a foot-pan of hot water. The exact temperature of the bath (55° to 65°), and the length of time the patient should sit in it (five to fifteen minutes), should be modified by the season of the year. The bath should be taken at bed-time, and on leaving it the patient should be quickly dried and retire to bed.

Recurring too late—*see* Irregular.

Recurring too early or lasting too long—Calc.-C., Calc.-Phos. (*profuse*); Sec., Sabi. (*painful*); Iod. (*with emaciation*); Trill., Plat. (*every two weeks*); Nux V., Ferr., Ign., Chin.

Suppressed.—Acon., Opi., Ver.-Alb. (*fright*); Cham., Coloc. (*anger*); Ign., Hyos. (*grief*); Coff., Opi. (*excessive joy*); Coni., Senec., Sep. (*chronic*). Puls. See Sitz-bath under **Menstruation**: Scanty.

Vicarious — Bry., Ham., Ferr., Senec.

Cessation of—Critical Age—Chin., Nux V., Ferr. (*pressure and burning on the top of the head; profuse discharges*); Lach. (*headache and sleeplessness; also flushes*); Glon. (*rush of blood to the head, with throbbing and noises in the head or ears, giddiness*); Cimic. *or* Ac.-Hydroc. (*sinking at the stomach*); Sulph. (*piles; flushes of heat; mental depression, etc.*); Nit.-Amyl., Sang., Ac.-Sulphs., *or* Lach. (*flushes*); Ambra (*numbness and stinging in the arms*); Sep., Plat., Gels., Cocc., Apoc., Ign., Kali C., Valer.

See also **Uterus, Miscarriage**, etc.

Mentagra: *see* **Beard**: Acne of.

Mental Weakness: Nux V., Sulph., K.-Brom., Ac.-Phos., Anac., Gels., Ign., Plumb., Zinc.

See also **Memory, Hypochondriasis, Brain-fag**, etc.

Mesenteric Disease: *see* **Tabes Mesenterica.**

Metritis: *see* **Uterus**: Inflammation of.

Metrorrhagia: *see* **Uterus**: Hæmorrhage from.

Miliaria—Miliary-Fever: Acon., Bry., Merc., Cact.

Milk-crust: Viola Tric., Iris, Rhus; Sep., Phyto., Clem.; Calc.-C., Sil. (*chronic cases*); Hep.-S., Lyc.

Milk-Fever: Acon. alt. Bry.

See **Lactation**: Abnormal.

Milk-leg: *see* **Phlegmasia Alba Dolens.**

Miner's Elbow: *see* **Bunion.**

Miscarriage: To Prevent — Caul., Sab., Sep., Helon., Sec.; Nux V. (*associated with constipation, producing straining, etc.*); Calc.-C., Sulph. (*for scrofulous patients*). The remedy should be taken once or twice a day for one or two months previous to the period corresponding with that at which the former miscarriage occurred. If there be a tendency to constipation the bowels should be kept gently relaxed with olive oil, fruits, or one of the above remedies. Cold sitz-bath daily often proves successful.

Threatened—Sabi. (*free discharge of blood*); Caul. *or* Sec. (*severe expulsive pains*); Cham. (*if caused by anger, fright, etc.*); Arn. (*if from a fall, or other mechanical injury*); Acon., Puls., Cedron. A dose every twenty or forty minutes till the symptoms decline. Also rest on a mattress in a cool room, with quiet, avoidance of hot drinks, excitement, etc. Special care to be exercised at the times when, had not pregnancy existed, menstruation would have recurred. Dr. Dyce Brown states, "If the pulse is quick, etc., with other fever symptoms, *Acon.* should be alternated with the other remedies; Sec. (*pains like labour and no discharge*); Sab. (*pains and discharge*); Ham. (*discharge but no pain.*)" Dr. Dalzell writes:—"*Secale* in *pure tincture* I have found more useful than any other medicine when decided *hæmorrhage* is present. The ordinary Tinct. Sec. (of the B. P.), in ten-drop doses every three or four hours, has succeeded in checking severe hæmorrhage, pregnancy *going on* to *the full* time. Smaller doses of this and other medicines had been given without any good result."

Moles: *see* **Nævus.**

Morbus Coxæ: *see* **Hip-joint Disease.**

Morning Sickness: *see* **Pregnancy**: Disorders of.

Mortification: *see* **Gangrene.**

Mouth: Inflammation of—K.-Chlor. (*simple cases, with exudation*). Dr. Dyce Brown says *K.-Chlor.* should be given in tangible doses, grs. i—ij. thrice daily for a child of three years of age; this never

fails in ulcerative Stomatitis. Merc., Bapt., Phyto., Bell., Caps., Nat.-Mur., Ac.-Nit., Merc.-Cor., Hep.-S.

Canker of—Merc., Ars., *or* Ac.-Mur., Bell. ϕ (*idiopathic*); Ac.-Nit. *or* Carbo Veg. (*mercurial*); Phyto. lot. (F. 29) *or* Ac.-Carbol. (F. 31), *or* Glycerole of Ac.-Mur. (F. 7) *or* Chloralum as a wash.

Fœtor of—Camph. (*with tender gums*). Rheum., Ac.-Nit.

Ulcers—Merc., with Ac.-Nit. as a wash; Ars., Bapt.; Hydras. lot. *or* gargle (F. 41); Kali Chlor. gargle.

Mumps: Acon. (*fever*); Merc.-Iod., Merc.-S., Merc.-Cor. 3x (*swelling of the glands*); Bell. (*brain implication*); Puls. (*implication of the testicles or breasts*); ointment of Bell. extract—gr. 1 to simple cerate 1 oz.

Muscæ Volitantes (*the débris of cells, shreds of tissue or fibre, chiefly caused by over-use of the eyes, and appearing like transparent beads or shreds, or as dark, singular-shaped bodies, floating about in the vitreous humour, and changing their position with every movement of the eye*); Merc., China, Ac.-Nit. (*from liver disorder*); Dig. (*weak, slow beating of heart*); Ver.-Alb. (*weak, irregular, or quick action of heart*); Phos. *or* Tereb. (*kidney disorder*); Mosch. *or* Agar. (*nervousness*); Phos. *or* Ac.-Phos. (*sexual excesses*); Phos., Quin., Carbo Veg. (*general debility*); K.-Hyd. (*obstinate cases*). Nux V. Rest of the eye is necessary, and the general health should be improved. Neutral tint glasses may be worn to render the spots less visible, if they are very troublesome.

See also **Amaurosis, Sight, Eyes,** etc.

Myalgia (*pain in the muscles*): Ver.-Vir. (*prostration of the muscular system, and muscular rheumatism*); Gels. (*with feverishness, etc.*); Arn. (*from over-exertion*); Bry., Gels., Rhus (*with inflammation*); Cimic., Ammon.-Mur., Caust., Acon., Bry., Dulc., Valer., Ant.-Tart., Colch. An Arnica bath is a splendid remedy for great fatigue of the body generally. A simple warm bath, or a Turkish bath, affords great relief.

Myopia (*near-sightedness*): Bell., Spig., Lith.-Carb., Macrot., *or* Acon. (*irritability, congestion, or inflammation*). Suitable glasses should be worn.

Nævus: Thuja ϕ ext., Kreasote-water—one drop of Kreas. ϕ to 80 of water, Calc.-C., Phos., Lyc. Croton Oil. Solution of Ferr.-Perchlor., applied daily.

Nails: Disease of—Merc., Sil., Graph., Ant.-C. For the local treatment of an *ingrowing toe-nail*, a piece of cotton wool or dry sponge should be pressed into the ulcer under the nail and over the nail, held in place by adhesive plaster saturated with *Hydras.*, *Thuja*, *or Merc.-Cor.*, and renewed as often as necessary. Or an *ingrowing nail* may be remedied by softening it in warm water, and then paring very thin the centre top of the nail in the line of the toe, and making a V-shaped excision in the centre at the end of the nail; the ingrowing portion should not be cut. The daily application of a solution of *Ferr.-Perchlor.*, according to Dr. Clifton, never fails. *Prevention*:—Broad-toed boots. A knowledge of the *causes* is necessary for the cure and prevention of this affection; these are, chiefly—small-toed boots and over-darned stockings. It is not the nail but the skin that is at fault. It is the morbidly sensitive and rapidly-growing skin, which, becoming thickened and ulcerated, overlaps the nail, and occasions the pain. Alumina (*spots on nails, brittle, thick*); Ant.-Crud. (*horny growth under nails*); Ars. (*cracked*); Phos. (*ulcers* round).

See also **Onychia.**

Nausea: Ipec., Nux V., Kreas., Ant.-T., Ant.-C., Cocc., Lob., Iris, Tabac., Apomorphia 3, Petrol.

See also **Dyspepsia, Vomiting,** etc.

Neck: Stiffness of—Ant.-T., Acon. (*from a draught*); Dulc. (*from damp*); Bry., Cimic., Bell., Phyto., Rhus.

See also **Crick-in-the-Neck** *and* **Wry-Neck.**

Necrosis: *see* **Bone.**

Nephritis: *see* **Kidneys**: INFLAMMATION OF, *and* **Bright's Disease.**

Nervous Debility: *see* **Debility.**

Nervousness: Coff. (*with sleeplessness*); Cham. (*restlessness, irritability, and sensitiveness, without ideal disturbance*); also infusion of green tea; Ign. (*extreme sensitiveness, pains in various parts, hemicrania, sensation as of a ball in the throat, etc.*); Hyos. (*perverted brain-function; restless, dreamful sleep, or sleeplessness*); Agar. (*pains as from icy-cold points, twitchings, tremors, etc.*); Borax (*noise intolerable*); Acon., Nux V. (*from anxiety, night-watching, etc., with palpitation, indigestion, etc.*); Puls., Bell., Ars., Ac.-Phos., Gels., Scutell., Cimic., Cyprid., K.-Brom., Zinc.-Val., Ambra. Exercise and out-of-door air.

See also **Hysteria, Hypochondriasis,** etc.

Nettle-Rash: Acon. (*feverishness*); Rhus, Apis; Puls. (*from food which disagrees*); Ars. (*when caused by an irritable stomach*); Ant.-C., Copa., Hydras.; Bry. (*sudden retrocession*); Dulc. (*from chill and wetting*); Urt.-U.; Chloral-Hyd. gr. j. ter die for an adult. This I have found more successful than any other remedy. (*Dr. D. D. Brown.*)

CHRONIC—*Cancer fluviatilis* (*Astacus fluviatilis, Cancer astacus*), 6. Sulph. (*irritation comes on when warm in bed*); Ars., Nat.-Mur. (*J. H. Clarke.*)

Neuralgia: IN THE FACE AND HEAD—Bell. (*redness of the affected part, sensitiveness to noise, light, etc., and ideal confusion*); Ars. (*burning and tearing pains, intermittent or periodic, worse at night or during rest, with extreme restlessness and anguish; especially in weak persons*); Ver.-Vir. (*from cold*); Acon. (*facial neuralgia, from cold, anxiety, with palpitation, quickened full pulse; and in plethoric persons*); Spig. (*head, face, eyes, and orbits involved, aggravated by stooping and movement*); Coloc. (*sudden violent lancinations, extending from the point of origin to a distance, chiefly on the left side*); Cham. alt. Merc.-S. (*extreme sensitiveness and irritability, especially in children and females*); Coff. (*nerve-pains, with restlessness and sleeplessness*); Chin. *or* Sulph.-Quin. (*from malaria, loss of animal fluids, etc.*); Chelid. (*with liver derangement; pain over right eye*); Cimic., Gels., Sticta, Nit. of Strych., Mag.-Sulph. (*supra-orbital, of left side*); Nux V., Staph., Coni.; Bell. liniment (F. 23); Ver.-Alb. (*semi-lateral, with icy coldness of the part*); Sulph. ϕ (*intermittent, pain worse at night, disappearing in morning, and coming again in forenoon*); Cedr., Kali B., Chel., Kalm., Glon., Stann., Arg.-Nit., Mez., Kali Iod., Puls., Phos., are also useful.

See also **Toothache,** *and* **Headache**: NERVOUS.

INTERCOSTAL — Cimic. (*infra-mammary pain especially in females*); Ars. (*in debilitated patients*); Ran.-Bulb., Rhod., Arn.; Bell. liniment (F. 23).

IN THE BONES—Zinc.

OF THE EXTREMITIES—Rhod., Ars.

See also **Sciatica, Hemicrania, Lumbago,** etc.

Nightmare: Nux V. (*from indigestion*); Chin. (*with oppression*); Sulph. (*with palpitation*); Acon., Puls., Kali Brom. Light digestible diet, out-of-door recreation, and a quickly-taken sponge-bath, with vigorous friction, daily; suppers or very late dinners, stimulants, fatigue, and too many or heavy bed-clothes, are to be avoided.

Night-Sweats: Ac.-Phos., Calc.-C., Chin., Ars., Hep.-S., Samb., Sulph., Ipec.; Merc. (*profuse sour perspiration — not hectic*). Sponging with tepid water and vinegar. Nitre is recommended by Celsus. Dr. Douglas recommends *Bry.* and *Gels.* for continued and profuse sweats, and adds, "Nothing has answered so well with me in the colliquative sweat of Phthisis as the two remedies."

See also **Hectic-Fever.**

Nipples: Sore—Sulph., Cham., Sil.; Phelland. (*pain after each suckling*); Crot.-Tig. (*shooting-pains from nipple to shoulder-blade*); Calend. *or* Arn. lot., *or* Arnicated Collodion ext.; *or* Glycerole of Ver.-Vir. (F. 13), *or* Hydras. (F. 6), *or* Tinct. of Benzoin, P. B., Ac.-Benz. lotion (F. 30), frequently applied, and not removed till next nursing: the nipple to be washed before applying the child. Ham. int. and ext., Phell., are also recommended.

Nodes: Sil.; K.-Bich. (*soft nodes on the scalp*); K.-Hydriod., Phyto. (*syphilitic nodes, with nightly pain*; Aur.

Noise: In the Ears and Head—Bell., Sulph.-Quin., Chin. *or* Dig. 1 *or* ϕ (*with deafness*); Nux V., Gels., Caust., Petrol., Graph., Sulph., Carbon. Sul., Merc.-S.

Sensitiveness to—Bell., Cham., Coff., Ign., Cann.-Ind., Nux V.; Bor. (*extreme cases*).

Nose: Bleeding from—Ipec.; Ac.-Sulph., Arn. (*from a blow*); Acon. (*full pulse, and in the plethoric*); Bell. (*flowing freely, with congestion*); Croc. (*dark, stringy blood*); Bry. (*preceded or accompanied by severe headache*); Ham. (*dark, fluid, frequent*); Mill., Chin. (*frequent recurrence*); Phos., Nux V., Ferr.-Phos., Carbo V., Chel., Erigeron. Inject a saturated solution of alum into the nostrils with a four-ounce syringe; as long as the mouth is kept open the fluid will pass round the posterior nares without going down the throat.

Catarrh of—Merc., Ars., Nux V., Puls.; Teuc. by inhalation; five drops into the hollow of the hand, add a little water, and inhale this preparation two or three times a day.

See also **Cold in the Head.**

Fœtor from—Iod. (*putrid ulceration of the lining membrane in scrofulous patients*); Thuja 1x, Elaps, Merc.-Iod., Aur., K.-Bich.

See also **Ozæna.**

Inflammation of—Bell. alt. Acon. (*acute*); Sulph. (*chronic*); Aur.-Met.

See also **Ozæna.**

Redness of—*see* **Acne**: Rosacea.

Soreness of—Ars., Merc., Graph., Sulph., Aur., Kali Bich.

See also **Cold in the Head.**

Numbness: Crotalus, Plumb. (*down right side*); Acon. (*and tingling*); Phos. (*and pricking of the whole body*); Ars. (*numb sensation, creeping in hands and feet*); Plat. (*numb spots, here and there*, crawling in the tongue, numbness in *coccyx whilst sitting*); Secale (*numbness of the fingers, pricking to their tips*); Agar. (*dead feeling*); Ac.-Oxal. (*sensation of swelling in ball of thumb*); Cicuta and Coni. (*numbness of the whole body*); Codeia (*numbness and pricking in various parts of the body*); Raph. (*numbness of hands and soles of feet*).

Nyctalopia (*inability to see well by day-light*): Bell. 1. A newspaper compositor cured.

Obesity: Ars., Calc.-C., Ferr., K.-Hyd., Phos., Amm.-Brom., Calc. Arsen., *or* Sulph., as auxiliary to a suitable dietary, excluding all articles of food and drink which contain an excess of *starch*, or *saccharine elements*. Daily open-air exercise is also necessary. Dr. J. H. Clarke also advises a tablespoonful of *lemon-juice* in a little water, sweetened, three times a day, if it does not disagree.

Œdema: *see* **Dropsy**: Local.

Œsophagus: Spasm of—Ver.-Vir.

Offensive Breath: *see* **Breath**: Fœtid.

Onanism: *see* **Self-Abuse**, *also* **Spermatorrhœa.**

Onychia (*inflammation of the matrix of the nail*): Arn., Sil., Sulph., Hep.-S., Ac.-Fluor., ext. and int.; Sil., Sulph. (*ulceration*); locally Calend. *or* Boracic Acid lotion.

See also **Nails.**

Ophthalmia: Catarrhal—Acon., Bell., Euphr., Merc., Chlor.-Hyd.

Neonatorum—Arg.-Nit., *or* Acon., and later, Puls., Merc., *or* Hep.-S. Frequent ablutions with tepid water are essential, and if efficiently and early used will often

alone suffice. But when the disease is fully developed before treatment is commenced, plain water ablutions are not sufficient. Syringing the eyes with a lotion of alum (grs. iv., aqua ʒj.) used three times a day is then necessary, in addition to frequent syringing with plain water *as often as any matter collects.* In one severe case, even this did not suffice, when I injected with a syringe a lotion of Arg.-Nit. (grs. v., aqua dest. ʒj.), once a day, with immediate good results (*Dr. D. D. Brown*).

PURULENT—Hep.-S., Ac.-Nit., Arg.-Nit., Calc.-C., Iod., Clem., Sulph. A very bad case cured by Arg.-Nit. 2c, every four hours (A. C. C.). A cloth bound over the eyes wetted with Ham. ad Aq. equal parts.

STRUMOUS—Merc.-Cor., Bell., Ant.-T., Euphr. (*acute*); Calc.-C., Clem., Hep.-S., Ars., Sulph. (*chronic*); Acon., Rhus T.

SYPHILITIC—Merc., Ac.-Nit., Aur.

Opisthotonos: HYSTERICAL — Mosch. 2x.

See also **Eyes**: INFLAMMATION OF.

Orchitis: *see* **Testicles.**

Otorrhœa: *see* **Ears**: DISCHARGE FROM.

Ovaries: DROPSY OF—Iod., Apis, Sep., Sulph., K.-Brom., Ars.

INFLAMMATION OF—Acon., Bell., Merc.-Iod., Ver.-Vir., Puls., Ham., Coni.; Plat. (*with induration*). Dr. Moore recommends *Merc.-S.* 3x and *Bry.* 1x when the pain extends towards the hip or upwards; *Phos.* when the pain extends downwards along the inner side of the thigh; and *Cimic.* and *Puls.* when Pleurodynia coexists.

NEURALGIA OF—Zinc.-Val. 3x, Ham., Caul., Coloc., Apis.

Ozæna: Aur., K.-Hyd., K.-Bich. 2x, Hydras., Phyto., Elaps 6, Ars., Merc.-Iod., Sang., Ac.-Nit., Zinc. Two cases cured by *Puls.* ϕ, gtt. j. ter die, for a month. Discharges were green and fœtid, and greenish hard masses at intervals; usual remedies had failed. Dr. Ussher notes a most offensive case cured with *Sang.* 1x dil. Injections of K.-Permang. Cadmium Sulph. 3x.

Painter's-Colic: *see* **Lead-Colic.**

Palpitation: *see* **Heart**: PALPITATION OF.

Pancreatitis: Iod., Merc., Iris, K.-Hyd., Atrop.

Paralysis: AGITANS (*Shaking-palsy*)—Merc. alt. Rhus 1x; Ac.-Nit., Nux V. (*when caused by* Mercury).

DIPHTHERITIC—Gels., Ign. ϕ, Coni., Nux V. Electricity.

FACIAL—Caust., Acon., Ign. Dr. Ussher cured a bad case with Acon. 1x alt. Gels. 1x; Kali Chlor., Graph.

GENERAL—Phos., Coni., Gels., Cocc., Bary.-C., Opi.

GLOSSO-LARYNGEAL — Bell., Hyos., Caust., Plumb.

HYSTERICAL—Ign., Cocc., Galvanism.

INFANTILE—Gels., Dulc., Bell., Sec., Plumb.; Massage.

OF ONE SIDE—Bary.-Carb., Nux V., Cocc., Arn.

OF THE LOWER EXTREMITIES—Phos., Strych., K.-Bich., Coni., Arg.-Nit., Rhus, Caul., K.-Hyd. (*uterine*); Cocc., Ver.-Vir. Liniment (F. 28) painted over spine daily, is very helpful when caused by spinal congestion. Electricity. Dr. Ussher says K.-Hyd. cured the worst case of uterine paralysis he ever saw, a hypertrophied uterus pressed upon the nerve.

PAINTER'S—Opi., Iod., Cup., Ars., Nux V., Alumen, persistent faradisation.

RHEUMATIC—Acon., Rhus, Arn., Strych., Sulph. Friction has effected striking cures; so has galvanism.

WASTING—Bell., Phos., Plumb.

Parturition: *see* **Labour.**

Pemphigus: Rhus 1, Phos.; Ran.-Bulb. (*infants*); Ars., Merc.-C.

Pericarditis: *see under* **Heart.**

Periostitis: *see under* **Bone.**

Peritonitis: SIMPLE—Acon.; Canth., Coloc., Bell., Merc. Dulcis, Lyc. alt. Merc.-Cor., *or* Bry. Linseed poultices over the abdomen.

PUERPERAL—*see* **Puerperal-Fever.**

TUBERCULAR—Ars., Calc.-C., Sulph., Chin.

Perspiration: *see* **Sweat.**

Pertussis: *see* **Hooping-Cough.**

Pharyngitis: *see* **Throat.**

Phlebitis: *see* **Veins**: INFLAMMATION OF.

Phlegmasia Alba Dolens (*milk-leg, white-leg*): Acon. alt. Puls. (*simple cases*), *or* Ham. (*varicose condition*), int. and ext., Led.-Pal., Bismuth; Phos., Ars., Lach. "In the active stage compresses act remarkably; and in the chronic, douches—hot and cold—have effected excellent cures" (*Dr. W. Johnson*). Dr. Moore states that he has seen cures effected by *Merc.-S.* 1 and *Bry.* 1; the reason being, he adds, that venous inflammation is the cause of the disease.

Photophobia (*intolerance of light*): Ant.-T., Bell., Glon., Gels., Euphr., Merc.-Cor., Nux V., Coni., Ars., Sulph.

See also **Eyes**: INFLAMMATION OF; **Sight**, etc

Phthisis (*a wasting away*) **Pulmonalis.** FOR THE CACHEXIA—Sulph., Hydras. ϕ, Calc.-C., Iod., K.-Carb., Ars., Phos., Ferr., Ars.-Iod., Calc.-Iod., Calc.-Ars., Calc.-Phos., Kreas., Kali-C., Chel., Coccus C., Thuja. A dessert-spoonful of rum to half a tumbler of warm milk, thrice daily, is strongly recommended. Cod-liver oil, in suitable cases, a teaspoonful or more, twice a day. Daily horseback exercise.

Dr. Burnett records many cases cured by Bacillic Virus (C.).

HÆMOPTYSIS—Ham., Ipec., Dros., Ferr.-Sulph., Ferr.-Acet., Trill., Arn., Acalipha, Acon., Phos.

INDIGESTION—Calc.-C., Lyc., Hydras., Merc., K.-Bich., Puls., Nux V., Jaborandi.

See also **Cough, Breathing, Dyspepsia, Hectic-Fever**, etc.

Phymosis: Merc.-Sol. 1x. Wrap the organ in a compress soaked with *Ham. lotion* (F. 40). The prepuce may be slit, or circumcision may be performed.

Piles: *see* **Hæmorrhoids.**

Pimples: Sulph., Calc.-C., Bell., Hep.-S., K.-Bich., Ant.-C., Carbo Veg., Kali Brom., Bellis.

See also **Acne.**

Pityriasis (*Branny Tetter—Dandriff*); Ars., Graph., Lyc., Tereb., Canth., Mezer., Sep. Sulphur-baths.

Placenta: RETAINED—Sabi., Puls., Sec.

See **Labour.**

Plethora: Ferr., Ars., *or* Calc.-C., in the higher potencies. Acon. *or* Bell. (*sufferings from*); active, open-air exercise.

Pleurisy: Acon., Bry., Ver.-Vir., Canth. (*acute*), also linseed-meal poultices; K.-Hyd., Sulph. (*chronic*). Pleurisy *with pungent heat*, rub the heated parts gently with the hand, dipped from time to time in *cold* water, until the heat is abated. Hot poultices and cold compresses may be required (*Dr. W. Johnson*).

FALSE—PLEURODYNIA—Ran.-Bulb., Cimic., Asclep.-Tub., Chel., Crot.-Tig., Arn., Acon., Ars.

Plica Polonica: Vinca M., Bor.

Pneumonia: Phos. (*simple, typhoid, and in children*) with or without Acon., Bry.; Ver.-Vir. (*early congestive stage*); Ver.-Vir., Lyc. (*Pleuro-pneumonia*); Ant.-T., Bry. (*Broncho-pneumonia*); Iod., Brom.; Ac.-Oxal.; Sulph. ϕ (*scrofulous patients*); Ars. (*prostration, anxiety, restlessness*); Chelid. (*liver derangement*); Ran.-Bulb. (*small spot or sore, as if from subcutaneous ulceration*). Cold compresses act remarkably well. Ars.-Iod., Hepar, Lyc. (*chronic*).

Polypus: NASAL—Calc.-C., Teuc., Merc.-Iod. (by inhalation, as for catarrh of the nose); K.-Bich., Thuja., Phos., Sang.; Tannin finely powdered used as a snuff. Surgical measures generally necessary; to be followed by application of Ac.-Nit. dil.

UTERINE: Rhus, Iod., Calc.-C., Lilium Tig., Sil., Sec. Surgical measures generally necessary.

Porrigo: Capitis—Calc.-C., Sulph., Sep., Dulc., Oleand., Hep.-S., Viola Tric., Sil., Ac.-Acet.

Favus—Sep., Rhus 2x, Merc.-Cor., Ars., Iod. 1 or 3x; also locally, Calendula cerate. Cleanliness, fat food, cod-liver oil.

Pregnancy: Disorders of—Cham. (*nervous restlessness, irritability, "fidgets"*); Acon. (*circulatory disturbance, palpitation*); Coff. (*sleeplessness*); Gels.

Colic—Nux V., Cham., Puls., Coloc.

Constipation—Nux V. alt. Sulph.; Plumb., Opi., Alum., Collin., Aloes, Sep., Bry.

See also **Hæmorrhoids.**

Convulsions—Bell., Ign., Ver.-Vir., Cic., Coff., Cann.-Ind., Cup.-Acet. Chloroform inhalations. Cold water to the head.

Cough and Difficult Breathing—Bell., Coni., Hyos., Nux V.

See also under **Cough.**

Cramps—Ver.-Vir., Cham., Ver. Alb., Nux V., Cup.-Acet. Friction.

Depression of Spirits—Cimic., Ign., Puls., Plat.

Diarrhœa—Puls., Ac.-Phos., Phos.

False Pains—Cham., Puls., Sec., Caul., Cimic.

Headache—Bell., Bry., Nux V., Ver.-Vir., Puls., Cocc.

Heartburn—Caps., Puls. ϕ, Iris, Calc.-C., Nux V., Sang.

Morbid Appetite—Calc.-C., Chin., Nat.-Mur., Carbo Veg., Sil.

Morning-Sickness, Nausea, etc.—Nux V., Oxalate of Cerium (*acidity*); Ipec. ϕ, Sep., Cup.-Sulph. 3x, K.-Brom. 1x, Kreas., Puls., Cocc., Nitrate of Cerium, Apomorph., Petrol. Cold to spine by means of Chapman's ice-bags. Morning-sickness of pregnancy is sometimes avoided by lying in bed till after breakfast. In some cases brushing the teeth must be avoided, or done very carefully. Obstinate vomiting has been arrested by dilating the os, passing the finger all round, removing all puckering and making a smooth edge.

Piles—*see* **Hæmorrhoids.**

Pruritus Vulvæ—Collin. 1x, Sep.; Borax int. and ext.; Ign. 3x, Ambra, Opi., Apis 2x; Ac.-Carbol, lotion (F. 31).

Salivation—Iod., Merc., Hep.-S., Jaborandi, Sulph., Natr.-Mur. Dr. Shipman states that he has known the chewing of coffee berries to cure when all other remedies had failed.

Toothache and Neuralgia—Coloc., Cham., Coff. (*during the attacks*); Sep., Cimic., Nux Mosch., *or* Nux V. (*in the intervals*); Merc., Kreas. *or* Staph. (*from decayed teeth*).

Urinary Difficulties—Bell., Hyos. (*suppressed urine*); Camph., Nux V., Canth., Cocc., Puls., Caust.

Varicose Veins—*see* **Veins.**

Presbyopia (*far-sight, from diminished power of accommodation, and an indication of advancing age*): Convex glasses should be worn directly vision fails for ordinary work. It is convenient to have two pairs of glasses, using the stronger for evening work. It would be useful in all cases of failing sight, from age, to use two or three powers, according to circumstances. Local cold water douches. Constitutional treatment is often necessary.

Prickly-heat: *see* **Lichen.**

Prolapsus: *see* **Anus** *and* **Uterus.**

Prosopalgia: *see* **Toothache** *and* **Neuralgia.**

Prostate: Enlarged—Cann. "In a recent case of enlarged prostate, at the age of sixty-two, with much irritation of the bladder, *Cann.* had an excellent effect, in fact cured it for the time" (*J. H. Nankivell, Esq.*).

Prostatitis (*inflammation of the prostate*): Puls., Acon., Merc., Bell., Sulph.; Iod. (*acute*); K.-Hyd. (*chronic*). Bell. extract is often required to relieve the severe pain. Thuja, Staph., Ac.-Nit. Recumbent posture. Opiate suppositories, fomentations, and hot hip-baths, are useful adjuncts.

Proud-Flesh: *see* **Excrescences, etc.**

Prurigo: *see* **Itching.**

Pruritus Ani: *see* **Anus**: ITCHING OF.

Pruritus Vulvæ: *see* **Vulvæ.**

Psoriasis: Merc., Iod., Ac.-Nit., Tellur. 3 trit., Led.-Pal. 1x, Jug.-C., Phyto., Sulph., Ars., Petrol., Ant.-Tart., Cicuta.

PALMARIS—Hep.-S., Ars., Caust., Graph. Glycerine lotions are valuable as palliatives.

Pterygium: Rhatan. 1x.

Ptosis (*paralysis of the eyelid*): Gels., Bell., Stram., Spig., Ver.-Alb., Sep.

Puerperal Convulsions: Ver.-Vir., Bell., Chlor.-Hyd.; Puls. (*fugitive pains*); Ac.-Hydroc.

Puerperal-Fever: Acon. alt. Bell.; Hyos., Stram., Merc., Bry., Ars. Hot injections of Condy's Fluid solution.

Puerperal Mania: Hyos. (*delusion*); Stram. (*violence*); Chlor.-Hyd.

Purging: *see* **Diarrhœa.**

Purpura (*a morbid state of the blood and capillary vessels*): Ver.-Vir., Acon. (*simple cases*); Chloral Hyd., Bell., Arn., Merc., Ac.-Sulphˢ., Ferr.-Sulph., Rhus, Ham., Ars.

HÆMORRHAGICA—Ham. 1x, Merc., Ars., Phos., Ac.-Sulphˢ., Rhus V., Lach., Ac.-Phos., Tereb., Ac.-Mur. Lemon Juice, Ac.-Sulph., as a beverage, ʒij. ad Aq. Oj.

Purulent Ophthalmia: *see* **Ophthalmia.**

Pustule: MALIGNANT: always due to direct local inoculation; Lach. 12, Ars., Arum., Acon., Bell. The Eschar should be promptly destroyed.

Pyelitis: Phyto., Uva, Ferr.

Pyrosis: Carbo Veg., Lyc., Ver.-Alb., Ac.-Sulphˢ., Nux V., Ars., Bry., Puls., Calc.-C. 3x, Arg.-Nit., Caps., Robinia, Carb. V., Ac.-Sulph. 20 to 30 drops in water.

See also **Dyspepsia, Heartburn,** etc.

Quinsy: Bary.-Carb. 3, Guaic. ϕ, Hep.-S. 3, Calc.-C., Arum.-Triph., Phyto., Phos., Bell., Merc.-Iod., Ars., Lach., Acon. Bary.-Carb. is almost specific.

Rabies: *see* **Hydrophobia.**

Rachitis: Ac.-Phos., Sil., Sulph., Ars., Phos., Calc.-Phos., Asaf. Barley boiled in milk or soup, or otherwise used as food, is very valuable, as it aids the formation of bone.

Ranula (*a cyst under the tongue, of variable size, containing albuminous fluid, perhaps a dilated orifice of a sub-lingual duct*): Bell. 3x alt. Merc.-S. 3x (*acute*); Calc.-C. 3x (*chronic*); Thuja. Mr. Skey recommends a thread of silk to be passed by means of a much-curved needle through the *centre* of the tumour. In a few days the Ranula will be found much reduced in size, leaving the thread at some distance from it. The thread should then be removed, and another applied through the centre of the remaining tumour.

Rash: *see* **Nettle-Rash, Itching, Roseola, Eruptions,** etc.

Red-gum: Cham., Puls., Calc.-C., Ant.-C., Apis.

Relapsing-Fever: Bry., with or without Acon.; Bapt., Gels., Eup.-Per., Rhus-T., Podoph.; Hyposulphite of Soda, grs. v. ter in die (*to prevent the relapse.*

Remittent-Fever: Gels. *or* Camph. (*invasive stage*); Acon. alt. Bell. (*hot stage*); Cin. (*during exacerbation*); Ipec., Bry. (*gastric disturbance*); Bapt. *or* Ars. (*typhoid symptoms*); Hyos. *or* Bell. (*brain symptoms*); Merc.-V. (*during remission*); Quin.-Sulph., Gels., Crotal.-H. In cold stage, *hot* fomentations of spine; in hot, *cold* pack; during interval, spinal washing at various temperatures.

Retching: *see* **Vomiting.**

Rheumatism: ACUTE (*Rheumatic fever*)—Acon. 1x, Bry. 1x, Rhus, Bell.; Cimic. (*mild cases*); Rhod., Colch. (*when the smaller joints are affected*); Ac.-Benz., Merc.-V.,

Dulc., Puls., Ars., Calc.-C. Wet-pack, twenty or thirty minutes, and tepid (70°) shallow bath one or two minutes.

Chronic—Rhus, Bry., Arn., Lyc., Sulph., Phos., Cimic., Caust., Merc., Ac.-Nit., Phyto., Iod., K.-Bich.; Asarum Europ. (*worse in cold dry weather*). The joints to be rubbed with Pine oil and and wrapped in Pine wool. Frictions. Sulphur springs. Cod-liver oil. Water treatment. Woollen or Pine wool under-garments.

Of the Chest (*intercostal muscles*)—Bry., Arn., Rhod., Ran.-Bulb., Rhus Rad., Cimic. Belladonna liniment (F. 23).

Gonorrhœal—Merc.-Biniod., Acon., Merc.-S., Puls., Thuja.

Heart—Spig., Dig., Acon., Ver.-Vir., Cimic., Cact., Bry.

Joints—Bry., Rhus, Ruta, Rhod., Lyc., Colch., Led.-Pal., Caust., K.-Hyd.; Puls. (*wandering pains*); Sulph., Arn., Quin.-Sulph., Calc.-Phos.

Rheumatic Gout—Sabi. (*in females with irritation of the uterus, bladder, and bowel*); Puls., Acon., Colch., Podoph. 1x, Coloc., Macrot. 1x trit.

See also **Lumbago, Stiff-neck**, etc.

Rickets: *see* **Rachitis.**

Rigors: *see* **Shiverings.**

Ringworm: of the Scalp—Sep., Calc.-C., Ars., Sulph., Ac.-Sulphs. ext. (F. 12). Locally Dr. J. H. Clarke says: "Cut the hair short over a small space round the part affected, wash well with soap, rinse the soap off thoroughly afterwards, dab on a little spirit to still further cleanse away all grease, then rub on a little cod-liver oil. This may be done every fourth night."

Vesicular (*Herpes circinnatus*)—Iris, Tellur., Rhus, Sulph. *See* note under **Herpes.**

See also **Herpes Circinnatus.**

Roseola (*Rose-rash*):—Acon., Rhus., Bell.

See also **Measles.**

Rupia (or, more correctly, **Rhypia**; *atonic, foul Ulcer*): Merc. (*simple*); Ac.-Nit., K.-Hydriod., *or* Iod. (*from Mercury*); Aur. (*syphilitic*).

Rupture: *see* **Hernia.**

Salivation: Merc., K.-Chlor. (*idiopathic*); Ac.-Nit., Iod.; Hep.-S., (*mercurial*); Iris, Jaborandi.

Sarcinæ: Vomiting of—Nux V. 1x, gr. j. thrice daily, and Ars. 2x, gr. j. morning and night.

Sarcocele: Merc.-Biniod., Aur., Puls., Coni., Clem., Phos., Sulph.

Scabies (*the Itch*); Sulph.-ointment (F. 55) *or* Sulph.-baths; Rumex-ointment (F. 53), Ac.-Acet. dil., Vinegar, ext.

Scald-head: Viola Tric., Hep.-S., Ars., Staph., Calc.-C., Rhus, Lyc., Sulph., Vinca M., Sep., Ac.-Acet., Oleand.

Scalds: *see* **Burns.**

Scarlet-Fever: Simple—Acon. alt. Bell., Apis; Sulph. (*during decline*); Ars. (*during desquamation*). Before desquamation begins, inunction with Ac.-Carbol. and olive oil (F. 20) once or twice daily. Dr. W. Johnson says inunction with Camph. and oil (F. 25) all through the disease is better than inunction with Ac.-Carbol. Sponging two or three times a day with dilute Acet.-Ac. (one part Acet.-Ac. to six of hot water) is also recommended.

Anginosa—Canth. ϕ or 1, Merc., Arum Triph., Crotalus H. (*ulceration of throat*); Apis (*much swelling*); Ver.-Vir. (*cerebral hyperæmia, severe vomiting, and high fever*). Sponging the whole surface rapidly with cold water, then wrapping in blankets till perspiration sets in.

Scars: *see* **Cicatrix.**

Malignant—Ailan. 1x, Ars., Bapt., Phyto., Apis, Ac.-Carbol., Ac.-Mur.; Cupr.-Acet. (*great mental depression*); *also* Spray of Ac.-Sulph., or Condy's Fluid diluted—one part of either to about twelve of water.

Prophylactic—Bell.

Sciatica: Coloc., Acon. ø (*recent rheumatic with much pain*); Rhus and friction (*chronic rheumatic*); Ars. (*neuralgic*); Senec. (*of the right side*); Nux V., Phyto. (*chronic*); Amm.-Mur., Coloc., Gnaphal., Tereb., Caps., Kali C., Apocy. C., Ruta, Nat.-Sulph. Dr. Holland says *Cimic.* is the best remedy in his experience. In the use of friction caution is necessary, for Dr. Clifton has seen several cases in which it has set up Inflammation of the sheath of the nerve, and much aggravated the symptoms.

Scirrhus: Coni., Hydras., Ars., Thuja, Phyto., all int. and ext.; Galium Ap. ext. Bell. compress. Mrs. G., bedridden, Scirrhus of left breast broken: Hydras. pulv. ʒj.; Aq. frigid. ℥j., ft. lot.: pain was relieved, and patient enabled to get up, and continued moderately well (using the lotion) for four years, after which I lost sight of her. (*W. F.*) Other remedies recommended are Ars.-Iod., Kali Cyanat., Cundurango, Cicuta, Kreas., Aur.

Screams of Infants: Cham., Acon., Bry., Ver.-Vir., Bell., Caps.; K.-Brom. (*night screaming*); Phos., Ant.-Tart., Zinc., Cicuta, Borax.

Scrofulous Affections: Iod., Calc.-Iod., Merc.-Iod., Sil., Phos., Sulph., Aur. Sea-bathing.

See also **Glands, Hip-joint Disease, Ophthalmia**: Scrofulous; etc.

Scrofulous Scars: Phyto. 1x.

See **Cicatrix.**

Scrotum: Dropsy of—*see* **Dropsy**: Local.

Scurvy: Fresh vegetables, potatoes especially, which may be preserved in molasses. Vegetable acids. Acids of Potash. Camph.-Sp., Aromatic Vinegar on compresses, for ecchymosis. Bry., Ferr., Merc.-S., Ham.

Sea-Sickness: Petrol., Staph., Cocc., Tabac., Nux V., Chlor.-Hyd., Apom.

Self-abuse: Moral treatment. The following remedies will assist: Ac.-Picr., Kali Brom., Ac.-Phos., Calc.-Phos, Staph. A professional correspondent informs us that a strait-jacket cured a case in which nothing else had the slightest effect.

See **Spermatorrhœa.**

Sensitiveness: Ign., Bell., Cham.

Serpent-bites: Ammonia, Ars. (*rapid prostration*); Ac.-Carbol., Ac.-Hydroc., Mosch., Arn., Arg.-Nit., Guaco milk. A handkerchief should be tied tightly above the wound, between it and the heart, to arrest the circulation of the poison, the wound forcibly sucked by a person whose mucous surface is perfect; and, according to Hill, alcohol largely drunk by the patient, as an antidote.

Shingles: *see* **Herpes Zoster.**

Shiverings: Camph., Acon., *or* Bry. (*cold*); Gels., Ign. (*nervous, without coldness*); Ars., Carb.-V., Astacus Fluviat, Phos.

Sick-headache: Iris, Bry., Nux V., Gels., Ver.-Alb., Ipec., Puls., Sep., Æscul. 1, Liq. Sod.-Chlor., Ign., Sang., Cocc.-I., Calc.-Acet., Zinc.-Sulph.

See **Headache.**

Sickness: Apomorphia 3, Ipec. (*simple*); Puls. *or* Ant.-C. (*from rich food*); Nux V. (*from alcohol*); Kreas. (*chronic*); Ars. 3x, Bismuth Nit. 1x or ϕ (*chronic gastric irritation, with pain and red tongue*); Ac.-Carbol., Ant.-Tart., Iod., Æthus., Merc.-S., Ferr.-Mur., Petrol., Cocc.-I.

See also **Vomiting,** *and* **Sea-Sickness.**

Side: Left—Pain in—Cimic., Puls. (*hysterical or uterine*); Bry. (*right side, rheumatic, or from liver*); Ran.-Bulb., Ars. (*neuralgic or anæmic*); Arn. (*muscular*); Ceanothus, Ac.-Oxal., Berb., Diosc.

Sight: Dim—Sabi., Gels. (*with vertigo and diplopia*); *see the remedies under* **Amblyopia.**

Double—Stram., Hyos., Cycla., Nat.-Mur., Phos., Cic., Gels., Zinc., Aur.-Met., Ac.-Nit.

See also **Eyes,** *and* **Amblyopia.**

Sinking at the Stomach: Ac.-Hydroc., Ign., Gels., Lauro, Hydras., Apoc.; Bapt. (*from chronic dysppesia*); Sep., Cimic. (*at the critical age*); Murex (*with prolapsus uteri*); Sulph.

Skin: *see* **Eruptions.**

Sleep: Comatose—Opi., Bell., Hyos., Hell., Gels. If from poison, the patient should be persistently made to walk about.

See also **Drowsiness.**

Sleepiness: Opi., Bell., Lyc. (*after dinner*); Acon., Cinnabar, Nux V., Coff.

Sleeplessness: Coff. 3x *or* 3, Gels., Glon., Bell., Ign., Hyos.; Phos. (*before midnight*); Acon. (*from pain*); Tabac. (*cardiac symptoms during menstruation*); Avena Sat., Agar., Stram., Coca E., Cimic., Ver.-Vir., Cocc. I., Nux V. In simple sleeplessness, one or two drops of Gels. ϕ are invaluable. A hop-pillow; walking, riding, or driving in the open air; a well-ventilated bed-room; a cold bath on rising; and an occasional warm bath at bed-time are excellent accessories. It is better to avoid wearing flannel next the skin in bed. *Chlor.-Hyd.* is a justly favourite hypnotic; and, in doses of 15 to 20 grains, generally succeeds, if administered coincident with the usual hour of sleep, and if other conditions be favourable. But it should only be used exceptionally. "*K.-Brom.* is better than Chloral, as a rule," writes Dr. W. Johnson, "and very far less dangerous; three to five grains, every half-hour or hour, or, in some cases, larger doses." Medicines ordered to be repeated are apt to cause wakefulness by the expectation of time for next dose. Mrs. J. found nothing but Tinct. Opii would do, and was ordered several doses, to be taken at intervals, but to stop at ninety minims. She took the whole ninety before the effect occurred, and then slept directly. Query: If the repetition had not been ordered, might not the first or second dose have been enough? *Strych.-Nit.* 3x, gtt. v. ter die when the patient cannot sleep till three or four in the morning. Kreasote 12 will often act like a charm in procuring sleep in cases of morbid and very painful dentition where the teeth decay rapidly and constipation is marked (*Dr. Wilde*). When he wakes at 2 a.m. and cannot sleep again, a light supper, including sandwiches, should be ordered by his bedside (*Dr. H. Nankivell*).

Small-pox: Ant.-T.; Hydras. 1x; Apis (*much swelling and itching*); Merc. (*during suppurative fever*); Ars. *or* Bapt. (*typhoid symptoms*); Bapt. (*prostration and threatened syncope*); K.-Brom., Acon., Bell., Sulph. Itching is best allayed by dusting the body with powder made of violet powder eight parts and *Ant.-T.* 1x one part.

To prevent pitting—The pustules on the face should be pricked with a needle after its immersion in *Ac.-Carbol.* Pitting may be to a great extent prevented, as also itching allayed, by smearing the part with bacon-fat; the rind should be cut off, leaving about one inch thickness of fat adhering to it, and with this the pustules should be gently smeared. Collodion is also good.

Smell: Loss or Perversion of—Acon. (*recent*); Puls., Merc., Sep., Calc.-C., Plumb., Sang., Mag. M., Amm. Mur., Diosc.

Sneezing: Merc., Euphr., Ars., K.-Hyd., Ipec., Valer.-Quin., Plantago., Euphr., All. Cepa. Snuff.

See also **Cold.**

Softening of the Brain: *see under* **Brain.**

Soreness of Infants: *see* **Excoriations.**

Somnambulism: Zinc., Opi. (*heavy sleep*); Acon., Cup.-M., Phos., K.-Brom. 1x, 5 grains at bed-time; Artemesia V. Wearing a copper wire from the body to the ground is said to be very successful.

Spasms: Coloc. (*of the bowels*); Nux V. (*of the stomach and bowels*); Ver.-Vir. (*sudden spasms of children from congestion, with nausea, prostration, etc.*); Chim. (*of the bladder*); Gels., Cocc.; Hyos. followed by Ver.-Alb.; Camph. 5 drops every half-hour.

Specks before Eyes: *see* **Muscæ Volitantes.**

Spermatorrhœa: Arg.-Met., Chin., Coni., Ferr., Gels., Dios., Nuph., Phos., Ac.-Phos., Staph., Dig., Eryng., Iris, Liq. Sod.-Chlor., Selen., Potass.-Brom., Canth., Dig. Dr. Maffey thinks medicine, except as a tonic, is of little use, and when he gives any he usually prescribes *Ac.-Phos.* ʒi. in ʒvi. of water. He thinks it is usually the phantasm of a morbid imagination, and best treated by kindly advice.

Spina Bifida (*cleft spine*): Calc.-Phos., Bry. The tumour should be protected by a piece of leather or gutta-percha moulded to the part.

Spinal Irritation: Gels. alt. Acon., Chin., Ign., Agar., Strychnia-Mur., Cimic., Nux V., Macrot., Arg.-Nit., Sulph., Tellur., Guaco., Secale. Locally, Ver.-Vir. as a paint, or diluted with hot water and applied hot or warm. Hot and cold, or tepid washing of the back. Faradisation. Definite occupation for women, as a regular duty of life.

Spine: Concussion of—Arn., Dios., Hyper., Cic.

Congestion of—Acon., Ver.-Vir. (*acute*); Rhus (*rheumatic*); Gels., Nux V., Bell., Agar. Also Ver.-Vir. locally as recommended for **Spinal Irritation.**

See also **Coccyodynia.**

Spitting of Blood: *see* **Hæmoptysis.**

Spleen: Enlargement of — Merc.-Biniod., Berberis Vulg., Ign., Chin., Ferr., Agar., K.-Brom., Spong. 2c, Cean., Nat.-Mur.

Sprain: Without delay bathe with water as hot as can be borne for a length of time, then apply a compress of Arn., Acon., Rhus, *or* Ruta. This treatment, employed immediately, generally cures at once. For recent sprain an infusion of *Bellis Perennis* is very useful as a local application. Dr. Dalzell recommends *kneading* the part, softly at first, and more vigorously as the pain subsides, using a little oil to prevent the friction from irritating the skin. Rest, extension of the joint to remove deformity, and sometimes a roller and splints to keep it in position, are points that should receive early attention, particularly in sprains and dislocation of the ankle with fractures of the fibula. Good strapping is often better than a roller, for it does away with the necessity for rest. Neglected sprains often require either *Iod.*, or *K.-Hyd.*, int. and ext.

Squinting: *see* **Strabismus.**

Stammering: The patient should be taught anew the use of language, and deliberately to form his mouth into the requisite shape. Medicines according to the general condition.

See also **Chorea.**

St. Vitus' Dance: *see* **Chorea.**

Sterility: In the Female—Coni., Aur., Sep., Dig., Plat., Bor., Calc.-C., Iod., Helon., Cimic. See Sitz-bath, under **Menstruation**: Scanty.

Stiff-neck: Acon. alt. Bell. (*from cold*); Ant.-T.; Cimic., Bry., Rhus, Bell.; Dulc. (*from damp*); Lachnates (*following scarlet fever*); Rhod., Chel. Wrap in cotton wool.

Stings: Liq.-Ammoniæ, Aq.-Potass., Led.-Pal., *or* Rhus, diluted, ext. Lime-water, a little quick-lime to a glass of water. The application of a fresh slice of onion to a wasp- or bee-sting, gives instant and often permanent relief.

Stitch-in-the-Side or Chest: Bry., Ran.-Bulb., Cimic., Acon., Arn.

See **Pleurisy.**

Stomach: Acidity of—Calc.-C., Rob., Lyc.

See also **Dyspepsia.**

Inflammation of—Acon. (*acute*); Ant.-T., Ars. Small pieces of ice to swallow; fomentations and a compress.

Pain or Spasm of—Acon., Nux V., Ac.-Hydrocy., Cham. (*spasm*); Bismuth (*burning pain, vomiting*); Ars. (*pain and vomiting*).

See also **Dyspepsia.**

Stomatitis: Merc.-Cor., Hydras., Bapt. (*with much saliva*); Bell., Caps., Nat.-Mur., Ac.-Nit., Hep. K.-Chlor.; when given internally, its local use is unnecessary. Hydras.-Mur. (F. 41) ext. every three hours.

Stone: *see* **Calculus** *and* **Gravel.**

Strabismus: K.-Brom., Gels., Bell., Hyos., *or* Stram. (*from cerebral causes*); Cina (*worms*); Bry. (*rheumatic*); Nux V. (*over-use of the eyes*); Spig. *or* Phos. (*undetermined causes*); Cycla., Alumina, Alumen. For optical defects, spectacles are required. The constant use of gutta-percha goggles in which a hole the size of a pea has been pierced, has sometimes proved curative after all other means had failed. By their use the exercise of the sight is prevented, except in a proper direction.

Strain: *see* **Sprain.**

Strangury: Camph. (*urgent and painful*); Nux V. (*spasm*); Bell. (*nervous, and in children*); Acon. (*from cold*); Canth., Tereb., Apis, Copa. 1x (*in elderly women*). Hot sitz-baths.

Stricture: *see* **Urethra.**

Strophulus (*red-gum rash*); Cham., Puls., *or* Ant.-C. (*gastric derangement*); Apis.

Struma: *see* **Scrofulous Affections**, etc.

Stye: Puls., Merc.; Thuja, Sulph., Staph. (*to prevent recurrence*); Hep.-S., Aur., Merc.-Iod. and Merc.-Iod. ointment (F. 49) ext.

Suffocation: Feeling of—Ign. *or* Cimic. (*nervous*); Acon., Dig., Cact., Lilium, Ac.-Hydrocy., *or* Samb. (*from heart-disease*); Lach. (*with feeling of suffocation coming on at night, especially if heart is affected*).

Sunstroke: Bell., Camph., Gels., Ver.-Vir., Cact.-G., Glon. The last remedy is valuable for sunstroke and its *sequelæ*. Small doses of brandy are also recommended.

Suppuration: Sil., Hep.-S., Merc., Calc.-C.; Chin. ϕ (*for debility*); alt. Sil. (*profuse discharge*); Calc.-Phos. (*strumous cases*); Ars., Arn.

Sweat: Ac.-Phos., Phos., Ver.-Alb., Samb., Calc.-C., Thuja; Merc. (*sour*); Petrol., Carbo V. (*fœtid*); Atropine, Sulph. of Atropia (*phthisical*); Sil. (*head*); Samb., Ac.-Fluor., Staph., Jaborandi, Carb. A.

Tendency to—Chin., Merc., Ver.-Alb., Carbo V.

See also **Night-Sweats.**

Sweating Fever: Acon., Bry., Samb., Cact., Merc., Jaborandi.

Swellings: *see* **Glands, Gumboils, Dropsy**, etc.

Swooning: *see* **Fainting.**

Sycosis: *see* **Beard**: Acne of. *For* Syphilitic Sycosis, *see* **Condylomata.**

Syncope: *see* **Fainting.**

Synovitis: Merc.-Prot.-Iod. 3x (*very painful and chronic cases*); Lilium, Acon., Puls., Apis, Sil., Kali Iod., Berb., Ac.-Benz., Iod. Alternate bathing with hot and cold water, then cold-water bandages.

See also **Joints**: Inflammation of.

Syphilis: Merc.-S., Merc. Præcip.-Rub., Ac.-Nit., Thuja, K.-Hyd., Still., K.-Bich., Merc. Bin., Mez., Graph., Phyto., Arg.-Nit., Aur. Ac.-Nit. ext. if within 24 hours of contagion; Ac.-Nit. fort. ext., if after that time. In hard Chancre *Merc.-Sol.* 2x should be given in doses of grs. j.–v. ter die. Calend. lotion.

Tabes Mesenterica: Merc.-Cor. (*when glands are in an inflammatory state*); Iod., Hydras., Sulph., Agar., Ars., Lyc., Calc.-C.; Ac.-Phos., Sil., Gels. (*febrile symptoms worse towards night*); also lime-water, ʒiij. to a glass of milk. In cases of great accompanying Atrophy, inunction with olive oil over the whole body every evening. For, or without, Constipation, the abdominal wet bandage, changed two or three times a day.

Tabes Dorsalis (*wasting of posterior columns of spinal cord, causing paralysis*) : *see under* **Paralysis.**

Tape-worm : *see* **Worms.**

Tarsal Ophthalmia : Hep.-S., Euphr., Clem., Sulph., Calc.-C., Merc.-Præcip.-Rub. int. and ointment (F. 50). Sometimes it is desirable to alternate the last prescription, week by week, with *K.-Hyd.* 3x, and an ointment of three grains of the pure salt to ʒj. of simple ointment.

Taste : Loss of—Puls. ; Merc. (*depraved*) ; Plumb., Sil., Calc.-C., Ant. T., Bor., Nat.-Mur.

Tea-drinking : Effects from—Chin., Nux V., Ammon.-Mur.

Teeth : Caries and Decay of—Merc., Kreas., Phos., Staph., Mez., Plant., Ars., Sil., Calc.-C., Silicate of Lime. Frequent washing and brushing the teeth is both preventive and curative.

Soreness and Sensitiveness of—Merc., Bell., Mang., Sulph.

See also **Toothache** *and* **Dentition.**

Tenesmus (*straining, difficult evacuation*) : Merc., Merc.-Cor. *or* Aloes (*dysenteric or with diarrhœa*) ; Sulph., Nux V., Alum., Hep.-S., Bell., Podoph., Plumb., Æscul., Ign. (*with constipation*) ; Arn. ; Iodoform as ointment or pessary.

Testicles : Enlargement and Inflammation of—Acon., Puls., Bell., Aur., Spong., Arn., Clem., Rhod., Merc.-Bin.-Iod. *Also* the use of a suspender. Arnica *or* Ham. lotion. Warm linseed-meal poultices.

See also **Epididymitis.**

Neuralgia of—Aur., Coni.

Wasting of—Iod., Coni. The late Dr. Newton informed us that he had cured three cases by K.-Hyd. We recommend the 2x or 3x dil. for this condition.

Tetanus : Acon. (*from cold*) ; Cham., Ham., Coni., Rhod. ; Cin. *or* Ign. (*from worms*) ; Atropine (*from congestion*) ; Chlor.-Hyd.

Traumatic—Nux V. *or* Strych., Acon., Bell., Ac.-Hydroc., K.-Brom. ; Chlor.-Hyd.

Tetter : Dry : *see* **Psoriasis.**

Moist—*see* **Herpes.**

Branny—*see* **Pityriasis.**

Thecal Abscess : *see* **Whitlow.**

Thread-worms : Cina, Teuc., Merc., Sant., Chin., Urtica, Spig., Bapt. ; Ign. (*nervous irritability*). Sant. 1x, gr. j. at bedtime, rarely fails to cure.

See also **Worms.**

Throat : Sore—Acon., Bry. (*simple acute, with dryness*) ; Bell. (*scraped sensation, and bright redness of the part*) ; Bary.-Carb. 6 (*inflammation confined to the tonsils*) ; K.-Bich. (*dark red*) ; Arum Tri. (*burning roughness and stinging*) ; Merc. (*swollen sensation, salivation, etc.*) ; Hep.-S. (*chronic cases*) ; Naja, Apis, Merc., Phyto. int. and as a gargle (F. 29), or Tannin (F. 29), when much mucus adheres to the membrane. K.-Potass and Nit.-Potass. a few crystals dissolved in the mouth when symptoms are first felt, will generally cure off-hand (*Dr. Stokes*). Cold compresses. Hot-water gargles are useful, but inhalation of steam is often better ; sucking ice also gives relief.

Relaxed or Clergyman's Throat—Calc., Phos., Phyto. (int. and by inhalation), K.-Hyd., Caust., K.-Bich., Ac.-Nit., Carbo Veg. ; Ars., Ac.-Mur. (*gangrenous*) ; Hydras, Alumina, Caps., Brom., Bary.-Carb. According to V. Grauvogl, *Arn.* is a most excellent remedy ; but in our practice Phyto. 1x generally succeeds. In a note Dr. Dalzell remarks :—"The majority of cases of clergyman's sore throat are cured by learning to use the vocal organs properly ; that is, speaking with the mouth, and not in the throat with half-empty lungs." For atony of the laryngeal muscles, Galvanism is recommended.

See also **Cold in the Head, Quinsy,** etc.

Throat Deafness : Puls. (*recent*) ; Iod. 3x (*chronic*) ; Hydras., Merc.-S. Water treatment.

Thrush : *see* **Aphthæ.**

Tic Douloureux : *see* **Neuralgia** ; Facial.

Tinea Favosa : *see* **Porrigo.**

Toe-nails, Ingrowing: *see* **Nails.**

Tongue:* Coated—Ant.-C. (*milky-white, offensive breath*); K.-Bich. (*yellowish*); Puls. (*roughish white*); Nux V. (*fore part clean, back part thickly furred*); Rhus, Bry. (*brownish*); Merc. (*thick, whitish, slimy fur, offensive breath*); Ars. (*silvery, with marks of teeth*); Acon., Mez., Ant.-T., Arg.-Nit., Ac.-Mur., Gymnocl., Bapt.

Cracked or Fissured—Merc.-Cor., Ac.-Nit., Spig., Bell., Arum-T., Rhus Ven. Hydras. int. and as a wash.

Dryness of—Acon., Ars., Bell., Tereb., Bry., Merc., Phos.

Inflammation and Swelling of—Acon. alt. Merc. (*from cold*); Bell. alt. Hep.-S. (*mercurial*); Apis, Arum-Triph. (*œdema*); Canth., Ac.-Oxal., Merc.-Vir. In acute Glossitis, with great swelling, Mr. Nankivell says he has found scarification necessary.

Ulcers on—Kali Chlor. ϕ, Merc., Merc.-Cor., Merc.-Iod. (*simple, non-mercurial cases*); Ac.-Mur., Sil.; Ac.-Nit. (*mercurial*); Lyc. (*under the tongue*); Bapt. as a wash; Hydras. int. and as a wash; Phyto.

Tonsils: Inflammation of (Acute)—*see* **Quinsy.**

Chronic enlargement of—Bary.-Carb., Sep., Calc.-Phos., Merc.-Iod., Calc.-Iod., Sil. (*strumous patients*); K.-Hyd. (*syphilitic*).

* The following arrangement is by Dr. Clifton, Northampton, and Dr. Clifton, Leicester:—

Tongue: Arum-Triph., Bell., Ant.-T. (*red all over; with considerably raised papillæ*); K.-Bich. (*red and glistening*); Gels. (*thick red*); Phyto. (*red tip, white coat, blistered sides*); Sulph., Rhus-Ven., Zizzia (*red sides, white centre*); Rhus (*triangle redness*); Rhus, Bapt., Ac.-Mur. (*red in centre patching with white sides, symptoms of relapse*); Ars., Gymnocladus-Can., Dig., Ac.-Mur. (*bluish*); Bry., Dios., Eup.-Per., Ham., Iris, Phos. (*white middle*); Rhus (*white on one side*); Caust. (*white on both sides*); Podoph., Bry., Ant.-C. (*thick white*); Nat.-Mur., Lach., Sep. (*cracked and indented with lines*); Æscul., Asclep., Hydras., Xanth. (*yellow*); Bapt., Rhus, K.-Bich. 3x (*dry, heated, soft, and flabby*); Merc.-S., Hydrast., Stram. (*with marks of teeth*); Lach. (*dry, red, cracked at tip*); Bapt. (*large at back*); Bry., Puls. (*dry without thirst*); Acon., Dig. (*clean and bright*).

Toothache:* Acon. *or* Bell. (*burning throbbing*); Merc. (*gnawing, aching, swollen gums, decayed teeth, flow of saliva, gum-boil, one tooth rises above the level of the other, etc.*); Kreas. (*from decayed teeth*); Bry. 1x, Merc.-V. (*worse at night, tender to touch*); Glon. 3x (*pains extending to back of head with stiffness*); Cham. (*neuralgic, the pains being unbearable, with swelling of the face, especially in females and children*); Coff. (*relieved by cold; nervous excitability, etc.*); Puls., Staph.; Phos. *or* Ars. (*tendency to*); Plantago, Apis, Spig., Kali C., Calc.-C., Mag.-C. A strong solution of pure Tannin (*Ac.-Tann.*) in tincture of Myrrh applied to the tooth on cotton wool almost infallibly relieves; the application repeated every half-hour, hour, or two hours, more or less frequently as required. When an abscess forms at the root of the tooth and discharges, or if there be periodical swelling of the gums, *extraction* is necessary. In such cases always look for stomach derangement.

During Pregnancy—Bell., Cham., Coff., Nux V., Ant.-C., Coloc., Sep., Cimic., Nux Mosch., Kreas., Staph.

See also **Face-ache, Neuralgia,** etc.

Tooth-rash: *see* **Strophulus.**

* We are exclusively indebted to Dr. Clifton, of Leicester, for the subjoined arrangement—

Toothache: Bell., Chin. (*upper teeth*); Phos., Spig., Arn., Caust., Sil., Cham. (*lower*); Cham., Merc. (*left side*); Bell., Staph. (*right side*); Merc.-V. 2x trit. in tooth, Ant.-C. 2x trit. in tooth, Cham. 6x, Staph. (*hollow teeth*); Arg.-Nit. (*sensitive*); Staph. (*feeling of tooth growing into jaw*); Caust., Acon. (*sensation as if too long*); Merc. (*loose feeling*); Bell., Gels., Hyos., Spig. (*jumping pains*); Ars. 3x, Puls. 3x (*intermittent*); Merc., Phos. (*worse at night*); Acon., Bell. (*worse cold*); Puls., Phos. (*better cold*), Ars., Chin., Phos. (*better after wine*): Nux V., Ferr.-Mur. (*worse after wine*); Puls., Nux, Ant.-C. (*worse after eating*); Ac.-Phos., Staph. (*better after eating*); Phos., Phyto. (*better whilst eating*); Puls., Chin. (*women*); Puls., Chin. (*before eat.*); Cimic., Cham., Bell., Ver.-Vir. (*at time*); Cimic., Merc.-V. (*pregnancy*); Cham. 6x, Acon., Cina *or* Spig. with worm symptoms (*children*); Puls., Staph., Phos. (*better from cold or drink*); Nux V. (*better from warmth*); Phos., Staph. (*better from rest*); Phyto. (*pressing on teeth*).

Torticollis: *see* **Wry-Neck.**

Tracheitis (*inflammation of the trachea*): *see* **Croup.**

Tremors: Nervous—Acon., Ign., Coff., Bell., Chin., Gels., Agar., Stram., Ant.-Tart., Merc.-S., Cimic. Cold water is a great sedative.

Trismus: *see* **Tetanus.**

Tuberculosis: Iod., Phos., Calc.-C., Bell., Ferr.-Iod., Calc.-Iod. Lime-water and milk (℥iij. to a tumbler-ful).

Tympanitis: (*distention of the bowels with air*): Coloc., Chin., Hyos., Iris, Tereb., Nux V., Ars., Lyc., Carbo Veg., Asaf. In extreme cases, and in the last resort, the bowels have been punctured successfully by Dieulafoy's aspirator.

Typhoid-Fever: *see* **Enteric-Fever.**

Typhus-Fever: Acon., Bry., Bapt. (*most stages; bewilderment; sinking of the vital forces* [*also* Ars.]; Ver.-Vir. (*invasive stage*); Hyos., Bell., Opi., *or* Rhus (*brain symptoms*); Cic. (*insomnia*); Ac.-Phos., Ars. (*extreme exhaustion*); Phos. (*lung-complications*); Merc.-Biniod., Phyto. (*glandular enlargements*); Ars., Bapt., Rhus, *or* Ac.-Mur. (*much toxæmia*); Tereb. 1x (*purplish petechiæ about the 12th day*). *In* true Typhus, *Rhus* is most frequently indicated. Other remedies are Agar., Quin.-Sulph., Merc.-Vir.

Ulceration *and* **Ulcers**: K.-Bich., Hydras. *or* Rhus, int. and ext., Ars. *or* Phos. (*small punched-out ulcers; chronic, and with debility*); Bell. (*erysipelatous appearance*); Caust., Sil. (*of lower extremities*); Merc., Merc.-Iod., K.-Hyd., Ac.-Nit.; also local applications of Ars. lotion (F. 35), Ac.-Nit. lotion (F. 33) (*syphilitic*); Sil. (*torpid*); Merc.-Iod., Phos., Sulph., *or* Calc.-C. (*scrofulous*). Ac.-Carbol. lotion (F. 31) (*torpid or fungous ulcers*); Mez., Comocl., Ast.-Rub., Pæon. Dr. Sherman states that daily painting Indolent and Varicose Ulcers with the tincture of muriate of iron is specific. Even in Irritable Ulcers this treatment is said to be effectual. Hydras. lotion or Arnica lotion are also recommended.

Of Stomach: Atropine.

Varicose: Ars. (*burning, debility*); Lyc.; Ham., ext. and int.; Ferr.-Mur., ext.

Uræmia: Dig. ¼ gr. extract, with water injected subcutaneously, cured uræmic poisoning from contracted kidney, the symptoms being drowsiness, insensibility, and frequent convulsions. Ac.-Carbol., Opi., Cupr.-Acet.

Urethra: Inflammation of—Cann., Gels. *See also* **Gonorrhœa.**

Stricture of (*spasmodic*)—Painting under surface of urethra with Bell. ϕ; Gels., Camph. (*especially when caused by blistering-fly*); Canth., Acon. (*urging, with cutting and tearing pains*); Merc. (*purulent discharge*); Nux V., Sulph., Clem.; also a hot-bath, fomentation, or injections per rectum. Sil., Phos., Cann., Hydras. ϕ (*organic stricture, and after repeated attacks of Gonorrhœa*). When passing catheter the patient should sit on hot sponge.

Urine: Abnormal Conditions of—Canth., Tereb., Ham. (*bloody*); Tereb., Dulc., Ac.-Nit. (*fœtid*); Lyc., Nux V., Ant.-C. (*gravelly*); Lyc. (*lithates*); Acon. (*with fever*); Bry. (*high coloured*); Ac.-Phos. (*milky looking, especially in children*); Chim. (*difficult urination, with mucous sediment*); Aur., Iod., Eup.-Pur., Dulc., Ant.-C., Ac.-Nit., Puls. (*mucus*); Uva (*thick and ropy*); Canth., Clem., Puls. ϕ, Chim., Sabi. (*purulent*); Lyc., Puls. (*purulent, with nauseous smell and gastric derangements*); Cin. (*thick and turbid, whitish, worms, etc.*); Merc., Ac.-Phos. (*symptoms worse in the morning*); Sabad., Rhus, Chin., Phos., Borax, Berb., Graph.

Excessive—Scilla (*pale, watery*); Murex (*very pale and excessive*); Ign. *or* Hyos. (*hysteric patients*); Ars. *or* Ac.-Phos. (*diabetic*); Bell., Phos., Caust., Lil.-T.

Burning or Scalding during passage of—Canth., Copa. 2x, Cann., Merc.-Cor., Gels., Acon., Bell., Apis, Lyc., Nux V.

Incontinence of—Cin. (*from worms*); Ac.-Phos. (*especially in old men*); Podoph. (*in women with sense of prolapsus*); Bell.* (*copious nocturnal discharges*); Ac.-Benz. (*in children with dry, rough skin, particularly with offensive odour*); Uran.-Nit., Gels., *or* Ac.-Benz. (*in the aged*); Ac.-Phos., Sec. ϕ, gtt. v., Bell., Canth., Ferr.-Mur., Chlor.-Hyd. (*nocturnal in children*); Ferr.-Phos. (*diurnal only*); Ars. (*when caused by iron*); Acon., Canth., Arg.-Nit., Apis, Eug.-Pur., Sep., Cina, Kreas., Kali Brom., Puls., Caust., Caps., Lyc. Children to be taught to retain water as long as possible during the day. Little salt to be eaten. Abstinence from fluid not necessary; bland liquids diminish acridity.

Scanty—Acon., Bry., Canth., Apis, Colch., Dig., Hell., Ruta, Staph., Xanth. *See also under* **Dropsy.**

Retention of — Camph. (*sudden spasmodic*); Nux V. (*spasmodic*); Gels., Ign. (*hysterical*); Canth., Opi., Arn., Hyos. (*in typhoid*).

Suppression of—Tereb. *or* Acon. (*from cold*).

Urticaria; Simple — Chlor.-Hyd. ø, Ant. Crud., Apis, Copa. 2x, Rhus, Crot.-Tig., Urt.-U.; Ars. alt. Apis are recommended.

From Cold — Acon.; Dulc. (*from damp*).

From Gastric Disorder—Ant.-C., Nux. V., Puls.

Chronic—Ars., Sulph.-Quin., Apis, Sulph., Nat.-Mur. Dr. J. H. Clarke recommends Cancer Flu.

Uterus: Antiversion of—Lilium.

Cancer of—Hydrocotyle Asiatica.

See also **Cancer.**

Congestion of—Bell., Murex, Lilium, Ver.-Vir. and lotion over the abdomen, *or* Sabi. (*arterial*); Calc.-C. (*chronic*); Coni., Puls., *or* Sep. (*venous*); Gels., Caul., Cimic. Dr. Moore says, "*Merc.-Sol.* and *Sep.* after *Bell.* are most reliable."

Fibroid Tumour of—Spong. 2x. One case with excessive and too frequent menstruation very much improved in three months by its administration, while *Vinca M.*, drop doses every four hours, controlled the menstrual discharge. (*A.C.C.*)

Hæmorrhage from—Ham., Ipec., Trill., Croc., Sec., Sabi., Chin., Cham., Vinca M., Thlapsi Bursa Pastoris.

See also **Menstruation**: Profuse.

Induration of—Merc.-Cor., Plat., Aur., Iod., Sil.

Inflammation of—Acon., Bell., Nux V., Iod., Merc.-S.

Irritability and Neuralgia of—Acon., Cimic. (*especially rheumatic*); Bell., Plat., Xanth., Gels., Ver.-Vir., Caul.

Prolapsus of—Podoph., Bell., Sep., Arn., Stan., Sec., Nux V., Aletris, Merc.-S., Liq. Sod.-Chlor.

Retroversion of—Ferr.-Iod., Sep., Aletris. A very unpromising case cured by Caul. and Sulph.

Spasm or Colic of—Cocc., Caul., Nux V., Ign., Sec., Cham., Gels.

Subinvolution of—Caul., Calc.-C.

Ulceration of—Merc.-C., Sep., Ars. Also local application of Glyc. Hydras. (F. 6), *or* injections of Calend. lotion (F 29), of Carbol. Glycer. (F. 32), *or* Ars. (F. 35).

Uvula: Elongated—Hyos.

Vaginismus: K.-Brom., Gels. Lavements of tepid water.

Varices: *see* **Veins**: Varicose.

Varicocele: Puls.; Ham. int. and ext.; Ac.-Fluor (*chronic cases*); Plumb., Ferr.-Phos., Aur., Osmium; also a suspender.

Variola: *see* **Small-pox.**

Veins: Inflammation of—Acon. alt. Puls.; Ham. (*varicose condition*); Phos., Lach., Puls. 1x (*tenderness or occlusion of the saphena*). *Also* Arn. ext. (*for pain*); *or* Ham. ext. (*varicosis*).

Varicose—Ham. Puls., Ac.-Fluor., Sil., Lyc., Ferr.-Phos., Ham. ext.

See also **Ulcers**: Varicose.

* Dr. W. Johnson remarks, "*Bell.* in large doses is a royal remedy for those copious spasmodic night evacuations which seem to have a certain analogy with Epilepsy."

Venereal Disease: *see* **Gonorrhœa, Syphilis**, etc.

Vertigo: Gels., Nux V., Puls., Calc.-C., Bell. (if Bell. fail, Atropia), Bry., Kali C., Acon.; Ac.-Hydrocy. (*with headache*); Coni. (*on rising after stooping, or going down stairs, or quickly turning round*); Cact. (*from heart disorders*); Cocc.-I. (*with sickness*); Agar.; Iod. (*in old persons*); Dig. (*from feeble heart's action*); Ver.-Alb. (*from flatulent pressure on solar plexus*); Glon. (*with occipital pain*); Sulph.; Nat.-Mur.. (*in unhealthy subjects*); Ac.-Phos. (*brain-fag*); China ϕ, or Quin gr. $\frac{1}{6}$ (*from debility produced by excessive loss of fluids of any kind, or after an acute disease*).

Vesicles: *see* **Eruptions**; **Erysipelas**: Vesicular; etc.

Vicarious Hæmorrhage: *see* **Menstruation**: Vicarious.

Voice: Hoarse, Loss of, Weakness of, etc.—Caust. (*recent, from cold, or over-use of the voice*); Arn. (*from over-use*); Acon., Bell. (*acute cases, with dry hard cough*); Phyto. (*constant dryness and roughness, with cough, and dark redness of the fauces*); Ign. (*hysterical*); Hep.-S., Rumex (*chronic hoarseness, wheezing breathing, loose cough, etc.*); Mang.-Carb. 3 (*loss after exertion, chronic*); Nux V. (*from spinal irritation*); Graph. (*dry, rough voice, cough, etc.*); Ant.-C. ("*when heated*"); K.-Bich. (*especially in tenor voices or in beer drinkers, with dark redness of fauces*); Glon., Phos., Carbo Veg. (*in elderly men*); Gels., Ac.-Oxal., Spong. Inhalations of *Iod.* are also of great service.

See also **Aphonia**; *and* **Hoarseness**.

Vomiting: Chronic—Kreas., Apomorphia, Ipec. (*with retching*); Ver.-Vir. (*violent prolonged vomiting and hiccough, and sensation as of a ball rising in the throat*); Cocc., Petrol. (*from the motion of a carriage; see* **Sea-Sickness**); Hydras., Kreas., Bismuth, Ars. (*from ulceration or cancer of the stomach, with wasting; gastritis, etc.*): Zinc. (*without retching*); Ac.-Sulph. (*empty retching*); Coni. (*chocolate-coloured in cancer symptoms*); Arg.-Nit. (*with great sourness*); Lyc. (*greenish masses*); Ant.-T. (*whitish rice-water vomit, with diarrhœa of similar fluid*); Nux V. alt. Bell. 3x. (*with constipation*); Nux. V. (*from gastric causes preceded by spasmodic pains*); Ver.-Alb. (*prostration and cold sweats*); Puls. (*mucous*); Nux V. 1x alt. Ars. 2x (*vomiting of Sarcinæ*); Ac.-Carbol., Iod., Ferr.-M. Cold compress over stomach. In obstinate vomiting from spinal irritation Dr. Dalzell has found Chapman's spinal ice-bag give speedy and permanent relief, applied an hour or more morning and night.

Of Bile—Iris, Podoph., Ipec., Bry., Merc.

Of Blood—Ipec., Ham., Kreas.

See **Hæmatemesis**.

Of Milk in Children*—Nux V. 1, Ac.-Sulphs., Ipec., Silic.

Curdled—Æthusa.

See also **Dyspepsia**; **Morning Sickness**; **Pregnancy**; **Sickness**.

Vulva (*for laceration of the posterior commissure from labour, especially from instrumental delivery*); Glyc. of Hydras. (F. 6) should be applied to the parts several times a day. Some practitioners prefer *Calend.* to *Hydras.* After washing with warm water, apply Sulpho-Carbolate of Zinc, 30 gr. to 1 oz. of water, and leave to dry; this twice or thrice daily. An infusion of hops, 1 oz. to 1 quart of boiling water, injected twice a day is very soothing.

Vulvæ pruritus: Chlor.-Hyd., Collin. 1x, Sep., Calad., Ac.-Nit., Ambra, Bor. int. and ext. Local use of the flowers of Sulphur (*especially for Worms*), Ac.-Carbol. lotion (F. 31).

Walking: Delay of the power of—Calc.-C., Sil., Phos., Ver.-Vir., Caust, Sulph., Calc.-Phos.

Wakefulness: *see* **Sleeplessness**.

* The prescriptions in the text are not for vomiting from overfeeding.

Warts: Calc.-C. (*small, soft*); Sep. (*large, hard*); Ant.-C. 2x (*smooth, soft, especially on neck, hands, arms*); Thuja ϕ ext., 12 or 30 int.; Rhus, Phyto., Ac.-Nit., ext. and int.; Sil., Sulph., Caust., Nat.-Mur.; Ac.-Nit., Arg.-Nit. (*on prepuce*); Kali Mur., Aur. Locally Dr. J. H. Clarke recommends solid lunar caustic, glacial Acetic-Ac.; also Chromic Acid.

Wasting: *see* **Atrophy**; *also* **Emaciation.**

Water-brash: Lyc., Nux V., Iris, Bry., Carbo Veg., Rob., Ars., Ver.-Alb., Calc.-C. 3x trit.; Ac.-Sulph., a few drops in a wineglass of water.

See **Heartburn, Dyspepsia,** etc.

Weakness: *see* **Debility.**

Water-in-the-Head: *see* **Brain**: DROPSY OF.

Wens: Bary.-Carb., K.-Hyd., Sil., Ac.-Benz., Calc.-C., Graph., Lyc. Dr. Clifton informs us of the cure of a Wen by *Coni.* 3x, which was administered for a uterine ailment. He has also cured several by puncturing with a sub-cutaneous needle, letting out a little of the contents, and then filling with *Phyto.* ϕ. The late Dr. Newton informed us that he had removed several large Wens with *Bary.-Carb.* 6. Dr. Murry Moore adds, in a note, "*Hep.-S.* often causes Wens to suppurate spontaneously, discharge, and disappear."

Wetting-the-Bed: *see* **Urine**: INCONTINENCE OF.

Whites: *see* **Leucorrhœa.**

White-Swelling: Bry., Arn. (*early stage*); Iod., Sil., Calc.-C., Sulph.

White-Leg: *see* **Phlegmasia Alba Dolens.**

Whitlow: Sil. alt. Bell. *or* Acon.; Hep.-S., Merc.; Stram. (*intolerable pain*). Paint the part affected with strong *Ac.-Nit.*; the relief to pain is almost instantaneous; if the unaffected part is touched with the acid, and smarting caused, it is relieved by plunging it in cold water. Should the latter fail to relieve the pain, a solution of *Phos.* should be painted on the finger. If administered early, *Sil.* 3x generally prevents the development of a whitlow. The thorough application of a thick slice of lemon around the Whitlow is also curative. Dr. Ussher directs: Begin with Hep.-S. every three hours (and Bell. ϕ by night); in a day or two Sil. 6x every four hours. Insert the finger in a lemon as a glove, and wear this day and night. By these means the use of the knife is rendered unnecessary. But when a Whitlow is fully developed, the sooner a free incision is made the better. Hot fomentation or poulticing is useful.

Whooping-Cough: *see* **Hooping-Cough.**

Wind: *see* **Flatulence.**

Womb: *see* **Uterus.**

Worms: LONG *or* ROUND—Merc., Sant., Ign., Spig., Sulph., Cin. ϕ.

TAPE—Filix Mas. ϕ in drop doses, morning and night for two or three weeks; Kousso, Cin., Sulph. Haustus Filicis Maris (F. 57). The draught early in the morning after fasting or after taking only liquid nourishment during the previous day. Dr. E. M. Hale states that "Pumpkin seeds, bruised, ʒj. at night; next morning castor oil ʒss and ether ʒj. mixed, will be followed by the expulsion of the worms in 6 or 8 hours."

THREAD—Cin. (*children*); Samb., Merc., China, Urt.-U. ϕ, Filix Mas, Teuc. 1x (*adults*); Ign., Spig., Sulph., Liq. Sod.-Chlor., Sant. 1x, and suppositories of cocoa-butter containing gr. ss. of *Sant.* Mr. Nankivell thinks *Sant.* the best remedy, and prefers it to *Cin.* Lime-water injections for a week are recommended. A teaspoonful of common salt to a quart of water, using a sufficient quantity for injection, on alternate days, for three times, often cures. Daily injections of infusion of Quassia, to which 20 drops of Tr. Ferr. Perchl. have been added, is a pretty certain remedy. In obstinate cases a large injection may be used, in which a solution of Corrosive Sublimate (¼ gr. to ʒij.) is added.

Wounds: Calend. (*lacerated and incised*); Led.-Pal. (*punctured*); Hyperic (*lacerated*); Lach. (*poisoned*); Arn. (*contused*); Ham. (*much discoloration*)—all remedies should be used int. and ext.

Wry-Neck: Cimic., Macrot., Ign., Bell., Nux V., Merc., Acon., Colch., Bry., Rhod., Chel.

Yawning: Ign., Plat., *or* Rhus (*convulsive*); Acon. (*with chilliness, and excessive and continually-recurring flatulence*); Chin.-Sulph. (*exhaustion*); Nux V., Chel., Nat., Mur., Lyc., Zinc.

Yellow-Fever: Camph. (*chill-stage*); Acon. alt. Bell. (*fever*); Phos.; Bry. *or* Ipec. (*gastric symptoms*); Canth. (*suppressed urine*); Arg.-Nit. (*black-vomit*); Ars., Crotal.

Zona: *see* **Herpes**: Zoster.

Formulæ.

Glyceroles, Injections, Liniments, Lotions, and Ointments.

I.—GLYCEROLES.

1. Glycer. Aloes.

℞. Tr. Aloes ϕ ʒj.
Glycer. ʒix. M.

Cracked skin, lips, nose, hands, etc.; fissured and sore anus.

2. Glycer. Amyli.

℞. Pulv. Amyli opt. ʒj.
Glycer. ʒviij.

Rub together till intimately mixed; then transfer the mixture to a porcelain dish, and apply heat, gradually raised to 240° F., stirring constantly until the starch particles are completely broken, and a translucent jelly is formed.

Broken Chilblains; Fistula; Prolapsus ani; prevention of bed-sores; irritation of the skin from any cause; etc.

3. Glycer. Amyli Medicat.

℞. Glycer. Amyli ʒj.
Trit. vel. Tinct. ϕ ʒj. M.

4. Glycer. Boracis.

℞. Pulv. Boracis ʒj.
Glycer. ʒiv. Solve.

Thrush; Pruritus vulvæ.

5. Glycer. Extracti Hamam.

℞. Extracti Hamam. ʒj.
Glycer.
Aq. Dest. } *aa* ʒiiss. M.

Fistula of anus; Prolapsus.

6. Glycer. Hydrast.

℞. Tr. Hydrastis Can. ϕ ʒj.
Glycer. ad ʒss. M.

Inflammation of uterus; sore nipples; fissured anus; cracked lips; etc.

7. Glycer. Ac. Mur.

℞. Ac. Hydrochlor. P.B. gtt. v.
Glycer. ʒss. M.

Ulcerous Thrush; ulcerated throat.

8. Glycer. Ac. Mur. Fort.

℞. Ac. Hydrochlor. P.B. gtt. x.
Glycer. ʒss. M.

Ulcerated throat; Thrush; etc.

9. Glycer. Phytolaccæ.

℞. Tr. Baccæ Phyto. Decand. ϕ ʒj.
Glycer. ad ʒss. M.

Inflammation of bone; Condylomata; excoriation of breast, etc.

10. Glycer. Amyli c. Ac. Tannic.

℞. Glycer. Amyli ʒj.
Glycer. Ac. Tannici ʒj. M.

Itching of anus, etc.

11. Glycer. Ac. Tannici.

℞. Ac. Tannici ʒj.
Glycer. ʒiv.

Rub together in a mortar, then transfer the mixture to a porcelain dish, and apply a gentle heat until completely dissolved.

12. Glycer. Ac. Sulphurosi.

℞. Ac. Sulphurosi ʒij.
Glycer. ʒiss. M.

Chapped hands; Chilblains; Ringworm, etc.

13. Glycer. Ver.-Vir.

℞. Tr. Ver.-Vir. ϕ ʒj.
Glycer. ʒix. M.

Sore nipples.

II.—INJECTIONS.

14. Injectio Glycer. Hydrast.

℞. Hydrast. Can. ϕ ʒj.
Glycer. ʒiij.
Aq. Dest. ʒss.

Gleet; inflammation of the womb.

15. Injectio Morphiæ.

℞. Morphia Pur. gr. ij.
Ol. Amyg. Dulc. ʒj.

Triturate together in a mortar.

16. Injectio Pot. Permang.

℞. Pot. Permang. Crysllls. grs. v. vel. x.
Aq. Dest. ʒj. Solve.

Gonorrhœa.

17. Injectio Liq. Plumbi.

℞. Liq. Plumbi Diacet. ʒss.
Aq. Dest. ʒij. M.

18. Injectio Glycer. Ac. Tann.

℞. Glycer. Ac. Tann. (F. 11) ʒiij.
Ol. Oliv. ʒj.
Mucilage ʒj. M.

Gonorrhœa.

19. Injectio Zinci Chlor.

℞. Zinci Chlor. grs. viij.
Aq. Dest. ʒviij.

Gonorrhœa; Gleet. Solve et cola.

III.—LINIMENTS.

20. Lin. Ac. Carbol.

℞. Ac. Carbol. Pur. ʒj.
Ol. Oliv. opt. ʒiv. M.

To facilitate desquamation in Scarlet-Fever, Measles, etc.

21. Lin. Ac. Carbol. Fort.

℞. Ac. Carbol. Pur. ʒij.
Ol. Oliv. opt. ʒjss. M.

Burns and Scalds; to prevent excoriations, etc.

22. Lin. Acon.

℞. Tr. Acon. Rad. ϕ ʒj.
Lin. Saponis P.H.B. ʒj. M.

Neuralgia; local forms of Rheumatism.

23. Lin. Bell.

℞. Chlorof. ʒj.*
Tr. Bell. ϕ ʒvij. M.

Neuralgia; Rheumatism.

24. Lin. Calcis.

℞. Ol. Lini. ʒij.
Liq. Calcis. ʒij.
Tr. Calend. ʒij. M.

Burns; Chilblains, etc.

Linen saturated with this and applied over the burn, and occasionally painted over with a soft brush, without removing the linen.

25. Lin. Camphoræ.

℞. Camphoræ ʒj.
Ol. Oliv. opt. ʒiv. Solve.

Scarlatina; Chicken-pox; Itching.

26. Lin. Rhus Tox.

℞. Tr. Rhus Tox. ϕ ʒjss.
Lin. Saponis P.H.B. ʒjss. M.

Lumbago, and other forms of local Rheumatism; Strains; Stiffness of joints; etc.

27. Lin. Urticæ Ur.

℞. Tinct. Urt. Ur. ϕ ʒj.
Ol. Oliv. opt. ad ʒviij. M.

Ulcerated Burns.

28. Lin. Ver.-Vir.

℞. Tr. Ver.-Vir. ϕ ʒj.
Lin. Saponis P.H.B. ʒj. M.

Over lower part of spine, in some forms of Paralysis, and nervous pain.

IV.—LOTIONS.

29. Lotiones Medicat.

℞. Tr. ϕ ʒj.
Aq. Dest. ad ʒvj. M.

* "Chloroform has been proved by Dr. A Waller to give great power to spirit to carry medicines through the skin into the circulation. I take advantage of this fact and add Chloroform to all spirituous lotions, as Arn., Rhus, Bell., Opi., Cimic., etc. It is frequently necessary to soften the above chloroformized lotions by additions of oil" (*Dr. W. Johnson*).

30. Lotio Ac. Benz.

℞. Ac. Benz. Pur. grs. xv.
Aq. Dest. ʒviij.
Sp. V. Rect. ʒiij.

Dissolve the Benzoic Acid in the Rectified Spirit, add the distilled water, and shake thoroughly until the precipitate which forms is entirely redissolved.

Sore nipples; Itching of the skin, etc. Its usefulness has been largely tested.

31. Lotio Ac. Carbol.

℞. Ac. Carbol. Pur. gr. x.
Aq. Dest. ʒvj. Solve.

Ulcers; Inflammation of the mouth.

32. Lotio Ac. Carbol. Fort.

℞. Ac. Carbol. Fort. ʒjss.
Glycer. ʒss.
Aq. ad ʒvj.

Burns and Scalds; to prevent excoriations, etc.

33. Lotio Ac. Nit.

℞. Ac. Nit. Fort. gtt. xxiv.
Aq. Dest. ʒvj. M.

34. Lotio Ant. Tart.

℞. Ant. Tart. Pulv. gr. j.
Aq. Calid. ʒss.
Glycer. ʒss.

Dissolve the Antimony in the warm water, and add the Glycerine.

Acne of the beard.

35. Lotio Arsenici.

℞. Tr. Ars. 2x. ʒss—ʒj.
Aq. ʒvj—ʒiij. M.

Or ℞. Liq. Arsenicalis (B.P.), gtt. v—x.
Aq. ʒviij. M.

Ulcers, with internal use of Arsenic; Pruritus vulvæ.

36. Lotio Boracis.

℞. Pulv. Boracis gr. xx.
Aq. Dest. ʒij. Solve.

Excoriations; Pruritus vulvæ.

37. Lotio Boracis *c.* Camph.

℞. Pulv. Boracis ʒj.
Sp. Camph. ʒj.
Lin. Saponis ʒij.
Glycer. ʒss.
Aq. Dest. ʒxii. M

Ringworm, Dandriff, etc.

38. Lotio Calc. Mur.

℞. Tr. Calc. Mur. 1x ʒj.
Aq. Dest. ʒj. M.

Boils.

39. Lotio Cabonis Deterg.

℞. Liq. Carb. Deterg. ʒss.
Aq. Dest. ad ʒviij. M.

Porrigo; Eczema; Itching of anus.

40. Lotio Hamam. Fort.

℞. Tr. Hamam. ϕ ʒij.
Aq. Dest. ʒj. M.

Chilblains; Fistula; Phymosis.

41. Lotio Hydrast. Mur.

℞. Hydrast. Mur. grs. iij.
Aq. Dest. ʒiij. Solve.

Stomatitis.

42. Lotio Kali Hyd.

℞. Kali Hyd. ϕ ʒj.
Aq. Dest. ʒviij. Solve.

Glandular swellings.

43. Lotio Sulphuris.

℞. Tr. Sulph. ϕ ʒj.
Aq. Dest. ad ʒj. M.

Ulcers; Acne of the beard.

V.—OINTMENTS.

44. Ung. Arnicæ.

℞. Flor. Arnicæ } aa ʒij.
Fol. „ }
Adipis Præparatæ lbij.

Moisten the flowers and powdered leaves with half their weight of distilled water, heat them together with the lard in a water-bath for three or four hours, and strain.

An excellent method of applying Arn. to parts where the lotion cannot be used.

45. Ung. Bals. Peru.

℞. Bals. Peru. ʒij.
Cerat. Cetacei, ℥iv. M.

A useful cerate for bed-sores.

46. Ung. Bismuthi.

℞. Bismuth.-Nit. grs. xxx.
Adipis Præparatæ ʒj. M.

Obstinate and intense itching and irritation, such as attends Eczema, and other skin diseases.

47. Ung. Hep. Sulph.

℞. Hep. Sulph. Pur. grs. iij.
Adipis Præparatæ ʒj. M.

Ganglion.

48. Ung. Hydrarg. Nit. Dil.

℞. Hydrarg. Nit. P.B. ʒj.
Cerat. Cetacei ʒj. M.

Itching of anus.

49. Ung. Merc. Biniod.

℞. Biniod. Merc. grs. ij.
Adipis Præparatæ ʒij. M.

Stye; Goître; Acne of the beard; Ganglion.

50. Ung. Merc. Præcip. Rub.

℞. Merc. Præcip. Rub. grs. iij.
Ung. Simpl. ʒj. M.

Tarsal Ophthalmia.

51. Ung. Potassii Iod.

℞. Potassii Iod. grs. lxiv.
Potassii Carb. grs. iv.
Aq. Dest. ʒj.
Adipis Præparatæ ʒj.

Dissolve the Iodide of Potassium and Carbonate of Potash in the water, and mix thoroughly in a mortar; or by adding the liquid to the melted lard, and whipping till cold, as in making cold cream.

Condylomata.

52. Extractum Rumicis.

℞. Rad. Rumicis Crispi. recentis ℥iv.
Glycer. ℥iij.
Aq. Dest. ℥xxvij.

Exhaust the root by percolation with the glycerine and water mixed together, and evaporate to the consistency of syrup.

53. Ung. Rumicis.

℞. Extracti Rumicis (see F. 52) ʒj.
Cerat. Simpl. P.H.B. ʒj. M.

Itch.

54. Ung. Rumicis *c.* Sulph.

℞. Ung. Rumicis (see F. 53) ʒj.
Sulph. Hypochlor. ʒij. M.

Acne of the beard.

55. Ung. Sulphuris.

℞. Sulph. Sublimat. ʒj.
Adipis Præparatæ ℥iv. Misce bene.

Itch; fissured, sore anus; Stye; etc.

56. Ung. Sulph. Hypochloridi.

℞. Sulph. Hypochlor. ʒij.
Adipis Præparatæ ʒj. M.

Acne Rosacea.

VI.—MISCELLANEOUS.

57. Haustis Filic. Maris.

℞. Ol. Filic. Maris ʒj.
Mucilag. } *aa* ʒij.
Glycer. }
Aq. Dest. ʒj. M.

Tape-worm.

58. Mistura Hydrast.

℞. Hydrast Mur. gr. iij.
Ac. Mur. dil. P.B. ʒj.
Aq. Dest. ad ℥vj. M.

A tablespoonful three times a day, ten minutes before a meal.

Acidity, etc.

59. Pepsine.

℞. Dr. Beale's Pepsine, gr. xij.
Ac. Hydrochlor. dil. ʒij.
Glycer. ʒij.
Aq. Dest. ℥iij.

Dose, one tablespoonful (=2 grs.).

Dyspepsia.

List of Remedies and Attenuations.

List of the Chief Remedies prescribed in the Clinical Directory, their Abbreviations, and the Attenuations in most frequent Use.

Name.	Abbreviation.	Attenuation.
Acidum Benzoicum	*Ac.-Benz.*	3x, 2. (See F. 30.)
,, Carbolicum	*Ac.-Carbol.*	1x, 1 int. (One part of ϕ to 100 of water for external use; see also F. 20, 21, 31, and 32.)
,, Fluoricum	*Ac.-Fluor.*	3x, 3.
,, Hydrocyanicum	*Ac.-Hydrocy.*	1, 3x.
,, Muriaticum	*Ac.-Mur.*	1x, 1, 3; ϕ as a gargle or paint in affections of the throat. (See F. 7 and 8.)
,, Nitricum	*Ac.-Nit.*	1x, 1, 3x, 3. (See F. 33.)
,, Oxalicum	*Ac.-Oxal.*	3x, 3.
,, Picricum	*Ac.-Picric.*	1x, 3
,, Phosphoricum	*Ac.-Phos.*	1x, 1, 3x, 3.
,, Sulphuricum	*Ac.-Sulph.*	1, 6, 12.
,, Sulphurosum	*Ac.-Sulphˢ.*	1x. (See F. 12.)
,, Tannicum	*Ac.-Tann.*	1x. (See F. 10, 11, and 18.)
Aconitum Napellus	*Acon.*	1x, 3x, 3, 6, ϕ Paralysis. (See F. 22.)
Æsculus Hippocastanum	*Æscul.*	1 or 3x is best according to our experience, but Dr. Hale states that it acts well in almost any dilution.
Agaricus Muscarius	*Agar.*	ϕ, 1x, 1.
Ailanthus Glandulosa	*Ailan.*	1x, 1.
Aloes	*Aloe.*	1x, 1, 6. (See F. 1.)
Alumina	*Alum.*	3x, 3.
Ambra	*Amb.*	ϕ, 1x, 3.
Ammonii Bromidum	*Ammon.-Brom.*	1x.
Ammonium Carbonicum	*Ammon.-Carb.*	1x, 1.
,, Muriaticum	*Ammon.-Mur.*	1x, 3x, 3, 30.
Anacardium	*Anac.*	1x, 1, 3.

Name.	Abbreviation.	Attenuation.
Antimonium Crudum	*Ant.-C.*	3, 5.
,, Tartaricum	*Ant.-T.*	1, 3x, 3, 5. (See F. 34.)
Apis Mellifica	*Apis.*	ϕ, 1x, 3x, 3.
Apocynum Cannabinum	*Apoc.*	ϕ (one to 5 drop-doses in dropsy); 1x (catarrh).
Argentum Metallicum	*Arg.-Met.*	3x, 6.
,, Nitricum	*Arg.-Nit.*	1, 3x, 3.
Arnica Montana	*Arn.*	1x, 3x, 3, 6 (6 *said to be best for hæmorrhage from the lungs*). (See F. 44.)
Arsenicum Album	*Ars.*	1, 3x, 3, 6, 12. The lower dilutions act best in Cancer, Cholera, low fevers, and skin affections; the higher, in nasal catarrh, Influenza, Neuralgia, etc. (See F. 35.)
,, Iodide	*Ars.-Iod.*	1, 3x.
Asafœtida	*Asaf.*	1x, 3x (hysteric disorders); 6 to 12 (diseases of bone).
Asclepias Tuberosa	*Asclep.-Tub.*	ϕ, 1x.
Atropia	*Atrop.*	1, 3x.
Aurum	*Aur.*	1, 3x, 5, 6.
,, Muriaticum	*Aur.-Mur.*	1, 3x, 3.
Baptisia	*Bapt.*	ϕ, 1x, 3x.
Baryta Carbonica	*Bary.-Carb.*	3x, 6, 12.
,, Muriatica	*Bary.-Mur.*	1x, 3x, 3.
Belladonna	*Bell.*	ϕ, 1x, 1, 3x, 6, 12. (See F. 23.)
Berberis	*Berb.*	ϕ, 1x, 3x.
Bismuthum	*Bismuth.*	ϕ, 1x, 1, 3x. (See F. 46.)
Borax	*Bor.*	1x, 1, 3x. (See F. 4, 36, and 37.)
Bovista	*Bovis.*	3x, 12.
Bromium	*Brom.*	1.
Bryonia Alba	*Bry.*	1x, 1, 3x, 6.
Cactus Grandiflorus	*Cact.*	ϕ, 1x, 3x, 6.
Calcarea Carbonica	*Calc.-C.*	3x, 3, 6, 12.
,, Muriatica	*Calc.-M.*	1x, 1. (See F. 38.)
,, Phosphorica	*Calc.-Phos.*	1x, 3x, 3.
Calendula	*Calend.*	ϕ (for external use).
Camphora	*Camph.*	ϕ. (See F. 25 and 37.)
Cannabis Indica	*Cann.-Ind.*	ϕ, 1x, 3x.
,, Sativa	*Cann.-Sat.*	ϕ, 1x, 3x.
Cantharis	*Canth.*	1x, 1, 3x. (For external use, one part of the ϕ tincture to about twenty of water.)
Capsicum	*Caps.*	1x, 3x, 3.
Carbo Animalis	*Carbo An.*	1x, 1, 3x, 6, 30.
,, Vegetabilis	*Carbo Veg.*	1x, 1, 3x, 6, 12, 30.
Caulophyllum Thalictroides	*Caul.*	1x, 1, 3x, 6.

Name.	Abbreviation.	Attenuation.
Causticum	*Caust.*	3x, 6; 1 for external use.
Ceanothus	*Cean.*	1, 3x, 6.
Cedron	*Ced.*	1x, 3x.
Chamomilla	*Cham.*	3x, 6, 12.
Chelidonium Majus	*Chel.*	1x, 3x, 3.
Chimaphila	*Chim.*	ϕ.
China	*Chin.*	ϕ, 1x, 3x.
Chinini Bromidum	*Chin.-Brom.*	1x.
Chininum Sulphuricum (Quinine)	*Chin.-Sulph.*	gr. $\frac{1}{6}$, 1x, 1—6.
Chloral Hydrate	*Chlor.-Hyd.*	1x.
Cicuta Virosa	*Cic.*	1, 3x.
Cimicifuga	*Cimic.*	ϕ, 1x, 3x.
Cina	*Cin.*	1x, 3x, 6.
Cistus Canadensis	*Cist.-Can.*	1x, 1.
Clematis	*Clem.*	1x, 1, 3x.
Cocculus Indicus	*Cocc.*	ϕ, 1x, 3x.
Coccus Cacti	*Cocc.-Cact.*	1.
Coffea	*Coff.*	3x, 3, 6.
Colchicum	*Colch.*	ϕ, 1x, 3x.
Collinsonia Canadensis	*Collin.*	ϕ, 3x.
Colocynthis	*Coloc.*	1x, 3x, 6.
Conium	*Coni.*	ϕ, 1x, 3x, 6, 12.
Copaiva	*Copa.*	1x, 1.
Corallium	*Coral.*	3, 6, 12.
Crocus Sativus	*Croc.*	1x, 2x, 3x, 3.
Croton Tiglium	*Crot.-Tig.*	3x, 6 (1 externally in Eczema Rubra).
Cundurango	*Cund.*	1, 3, 6.
Cuprum Metallicum	*Cup.-M.*	3x, 3, 6.
Cyclamen	*Cycl.*	3x, 3.
Digitalis	*Dig.*	ϕ, 1x, 3x.
Dioscorea Villosa	*Diosc.*	ϕ, 1x, 3x.
Drosera	*Dros.*	ϕ, 1x, 3x, 3.
Dulcamara	*Dulc.*	1x, 3x, 3.
Elaps	*Elaps.*	7 or 8 (lowest procurable).
Elaterium	*Elat.*	1, 3x.
Eupatorium Perfoliatum	*Eup.-Perf.*	ϕ, 1x, 3x.
,, Purpureum	*Eup.-Pur.*	1x, 1, 3x.
Euphorbium	*Euphor.*	3x.
Euphrasia	*Euphr.*	1x, 3x, 6; ϕ one part to ten for ext. use.
Ferrum Metallicum	*Ferr.-M.*	1, 3x, 5.
,, Muriaticum	*Ferr.-Mur.*	ϕ. 1x, 3x.
,, Phosphoricum	*Ferr.-Phos.*	1, 3x.
,, Redactum	*Ferr.-Red.*	ϕ, 1x.
Filix Mas	*Fil.-M.*	ϕ. (See F. 57).
Gelseminum	*Gels.*	ϕ, 1x, 3x. In facial neuralgia on the left side, the ϕ tincture acts very quickly.

Name.	Abbreviation.	Attenuation.
Glonoine	*Glon.*	3x, 3.
Graphites	*Graph.*	2, 6, 12.
Hamamelis Virginica	*Ham.*	1x, 3x; ϕ ext. (See F. 5 and 40.)
Helleborus Niger	*Hell.*	1x, 3.
Helonias Dioica	*Helon.*	ϕ, 1x.
Hepar Sulphuris	*Hep.-S.*	1, 3x, 3, 6. (See F. 47.)
Hydrastis Canadensis	*Hydras.*	ϕ, 1x, 3x, 3. (See F. 6, 14, 41, and 58.)
Hyoscyamus Niger	*Hyos.*	ϕ, 1x, 3x, 3.
Hypericum Perforatum	*Hyper.*	1x.
Ignatia Amara	*Ign.*	ϕ, 1x, 3x, 3, 6.
Iodium	*Iod.*	1, 3x, 1x as a paint.
Ipecacuanha	*Ipec.*	ϕ, 1x, 3x.
Iris Versicolor	*Iris*	ϕ, 1x, 3x.
Jaborandi	*Jab.*	1x, 3, 6.
Juglans Cinerea	*Jug.-C.*	ϕ.
Kali Bichromicum	*K.-Bich.*	1, 3x, 3.
,, Bromidum	*K.-Brom.*	ϕ, 1x.
,, Carbonicum	*K.-Carb.*	6, 12.
,, Chloratum	*K.-Chlor.*	ϕ, 1, 3x, 3.
,, Hydriodicum	*K.-Hyd.*	ϕ, 1x, 3x. (See F. 42 and 57.)
,, Nitricum	*K.-Nit.*	1x, 3x.
Kali Permanganicum	*K.-Permang.*	(The salt as an injection—F. 16; and as a gargle—one part in 48 of water.)
Kalmia Latifolia	*Kal.-L.*	ϕ, 1x, 3x.
Kreasotum	*Kreas.*	1, 3x, 6, 12. (For external use, one drop of pure tincture to 80 of water.)
Lachesis	*Lach.*	6, 12.
Laurocerasus	*Lauro.*	ϕ, 1x, 3x.
Ledum Palustre	*Led.-Pal.*	1, 3x; ϕ ext.
Leptandra Virginica	*Leptand.*	ϕ, 1x, 3x.
Lobelia Inflata	*Lob.*	ϕ, 1x, 3x.
Lycopodium	*Lyc.*	3x, 3, 5, 6, 12, 30.
Manganum Acet.	*Mang.-A.*	1x, 3x, 3.
Mercurius Biniodatus	*Merc.-Biniod.*	1, 3x. (See F. 49.)
,, Corrosivus	*Merc.-Cor.*	1, 3x, 3.
,, Iodatus	*Merc.-Iod.*	1, 3x.
,, Solubilis	*Merc.-S.*	1, 3x, 5, 6.
,, Vivus	*Merc.-V.*	1, 3x, 5, 6.
Mezereum	*Mez.*	1x, 3x.
Millefolium	*Mill.*	ϕ, 1x.
Moschus	*Mosch.*	ϕ, 1x, 3x, 6.
Murex Purpurea	*Murex.*	3.
Naja	*Naja*	6.
Naphthalin	*Naph.*	3x, 6x.
Natrum Carbonicum	*Nat.-Carb.*	5, 12.
Natrum Muriaticum	*Nat.-Mur.*	6, 12.

Name.	Abbreviation.	Attenuation.
Nuphar Lutea	*Nuph.*	1x, 3x.
Nux Juglans	*Nux Jug.*	1, 3.
Nux Moschata	*Nux Mosch.*	3x.
Nux Vomica	*Nux V.*	ϕ, 1x, 1, 3x, 3, 6. The 6th dil. is much prescribed for flatulence, constipation, etc.
Oleander	*Olean.*	ϕ, 1x, 3x.
Opium	*Opi.*	1x, 3x, 3, 30.
Petroleum	*Pet. or Petrol.*	3x.
Phellandrium	*Phell.*	3x, 5.
Phosphorus	*Phos.*	3x, 3, 6.
Phytolacca Decandra	*Phyto.*	ϕ, 1x, 3x. (See F. 9.)
Plantago Major	*Plant.*	1x, 3, 6.
Platina	*Plat.*	3x, 5, 6, 12.
Plumbum	*Plumb.*	3x, 3, 5. (See F. 17.)
Podophyllum	*Podoph.*	ϕ, 1x, 3x.
Pulsatilla	*Puls.*	ϕ, 1x, 3x, 3, 6.
Quinine, *see* Sulphas Quinæ *and* Chininum Sulph.		
Ranunculus Bulbosus	*Ran.-Bulb.*	ϕ, 1x, 3x, 3.
Ratania	*Ratan.*	1, 3x.
Rheum	*Rheum*	1, 3x.
Rhododendron	*Rhod.*	1, 3x, 3.
Rhus Toxicodendron	*Rhus*	1x, 3x, 3; ϕ ext. (See F. 26.)
Robinia	*Rob.*	ϕ, 1x, 3x.
Rumex Crispus	*Rumex*	ϕ, 1. (See F. 52, 53, and 54.)
Ruta Graveolens	*Ruta*	1, 3x; ϕ ext.
Sabadilla	*Sabad.*	ϕ, 1, 3x, 3.
Sabina	*Sabi.*	ϕ, 1x, 3x.
Sambucus Niger	*Samb.*	ϕ, 1x, 3x, 3.
Sanguinaria Canadensis	*Sang.*	1x, 1, 3x.
Santoninum	*Sant.*	1x, 1.
Sarza	*Sarz.*	ϕ, 1x, 3x.
Secale Cornutum	*Sec.*	ϕ, 1x, 3x, 3.
Senecio	*Senec.*	ϕ, 3x.
Senega	*Seneg.*	ϕ, 1x, 3x.
Sepia	*Sep.*	3x, 6, 12.
Silicea	*Sil.*	3x, 6, 12.
Spigelea	*Spig.*	1x, 3x, 3, 6.
Spongia	*Spong.*	1x, 3x, 3.
Stannum	*Stann.*	3x, 5, 6, 12.
Staphysagria	*Staph.*	1x, 3x, 3, 6.
Stillingia	*Still.*	ϕ, 1x, 3x.
Stramonium	*Stram.*	ϕ, 1x, 3x, 3.
Strychnia	*Strych.*	1, 3x, 6.
Sulphas Quinæ	*Sulph.-Quin.*	gr. $\frac{1}{6}$, 1x, 1—6.
Sulphur	*Sulph.*	ϕ, 3, 6, 12. (See F. 43 and 55.)
Tabacum	*Tabac.*	3x, 3, 6.
Taraxacum	*Tarax.*	ϕ.
Tellurium	*Tellur.*	3 trit., 5, 6, 30.
Terebinthina	*Tereb.*	ϕ, 1x, 3x.

Name.	Abbreviation.	Attenuation.
Teucrium	*Teuc.*	1x, 3x; ϕ ext. Also the dried herb, finely powdered, taken as snuff in polypus, etc.
Thuja Occidentalis	*Thuja.*	3x, 6, 12; ϕ ext.
Uranium Nitricum	*Uran.-Nit.*	1x, 3x.
Urtica Urens	*Urt.-U.*	ϕ, 1; ϕ ext. (See F. 27.)
Uva Ursi	*Uva*	ϕ, 1x, 3x.
Valeriana	*Val.*	ϕ, 1x.
Veratrum Album	*Ver.-Alb.*	1x, 3x, 3.
,, Viride	*Ver.-Vir.*	1x, 3x, 3; ϕ ext. (See F. 13 and 28.)
Verbascum	*Verbas.*	ϕ, 1x, 3x, 3.
Vinca Minor	*Vinca M.*	ϕ, 1x, 3x.
Viola Odorata	*Viola O.*	ϕ, 1x, 3x.
,, Tricolor	*Viola Tric.*	ϕ, 1x, 3x.
Xanthoxylum Fraxineum	*Xanth.*	ϕ, 1x, 3x.
Zinci Valeriana	*Zinc.-Val.*	1, 3x.
Zincum Metallicum	*Zinc.*	3x, 5.

INDEX:

GENERAL AND GLOSSARIAL.

The meanings of many words, not found in common dictionaries, are given between brackets.

Many Conditions and Symptoms, not specified in this Index, are referred to in the MATERIA MEDICA, and, more particularly, in the CLINICAL DIRECTORY, Part VI., pp. 987–1042.

See also *Hints to the Reader*, pp. xi–xiii.

AA, an abbreviation of the Greek word *ava*, and signifies, *an equal quantity of each*
Abdomen, compress for, 127, 609, 613, 646; dropsy of (*Ascites*), 351; enlarged, 622, 989
Abnormal (*ab*, without, *and norma*, rule; *deviating from the usual order; unnatural*)
Abrasion, a sore caused by removal of the epidermis, 738, 761
Abscess, 770; diseased bone and, 770; mammary, 771; opening of, 772; treatment, 773; diet and hygiene, 773; on external meatus, 475
,, thecal, 744
Accessories in disease, 105
Accidents, 789, 799
Acetic acid (*vinegar*), 231, 267, 268, 604
Acicular (*ακις*, a point; *needle-shaped*), crystals, 270
Aching and stiffness from exertion, 817
Acidity, 989
Acidum Aceticum, 232, 267, 268, 604
,, Benzoicum, 688, 744
,, Carbolicum, *see* Carbolic Acid
,, Fluoricum, 819
,, Hydrochloricum, 232, 381, 394
,, Hydrocyanicum, 237, 381, 394, 980
,, Muriaticum, 820, 967
,, Nitricum, 820, 967
,, Oxalicum, 549, 555, 968
,, Phosphoricum, 822
,, Prussicum, 237, 381, 518, 541, 980
,, Sulphuricum, 135, 964
,, Sulphurosum, 823
Acne (*Pimple*), 731; varieties, 732; causes, 733; treatment, 733; accessories, 734; of the beard, 734, 990
Aconite-lotion, 413; vapour, 135
Aconitum Napellus, 824, 982; and Belladonna, 846
Acoustic (*ακουστος*, audible; *that which relates to the ear or to sounds*), 483, 781
Actæa, *see* Cimicifuga Racemosa, 867

Adipose tissue (*adeps*, fat; the *tissue which encloses the fat*), 310
Administration of remedies, 101
Adynamia (*a*, without, *and δυναμις*, strength; *depression of vital power*), 858
Ægophony (*αιγος*, a goat, *and φωνη*, sound; *a sound of the voice compared to the bleating of a goat, heard by auscultation*), 552
Æsculus Hippocastanum, 828
Agalactia, 990
Agaricus Muscarius (*Fly-agaric*), 394, 662, 733
Age and Youth, 777
„ old, and senile decay, 777
Aged, treatment of, 784
Agglutination (*ad*, to, *and gluten*, glue; *the adhesion of two surfaces by a tenacious substance, as of the eyelids, by pus*), 445
Agnus Castus, 695
Ague (*Intermittent fever*), 209
Ague-cake (*enlarged spleen*), 212
Ailanthus Glandulosa, 170
Air, 57; pure, 58; impure, 58; spoiled by breathing, 59; change of, 142
Airy sleeping-rooms, 59, 297
Albumen (*albus*, white; *a proximate principle of animals or vegetables, existing in its purest state in the white of egg; it enters largely into the composition of the fluids and solids of the body*), 671
Albuminuria (*albumen, and ουρον, urine; a condition in which albumen is secreted with the urine*), 337, 498, 669
Alcohol, 975; in snake-bite, 761; drinking, *see* Stimulants
-algia (*a termination of many words, denoting pain, as* Neuralgia, *nerve-pain*, etc.)
Aloes, *see* Aloe Socotrina, 828
Alopecia (*αλωπηξ*, a fox; *baldness resembling the loss of hair observed in a fox suffering from tha mange*), 753, 822, 858
„ Areata, 753
Alternation of medicines, 103
Alum in bread, test for, 110
Amaurosis, 451; ophthalmoscope in, 451; causes, 452; symptoms, 452; treatment, 453; accessories, 455; preservation of sight, 455
Amblyopia (*αμβλυς*, obscure, *and ωψ*, the eye; *impairment of vision*), 454, 458; causes, 458; treatment, 459
Amenorrhœa (*absent, retarded, or deficient menstruation*), value of cold sitz-bath in, 125. *See also under* Puls., Coni., Cimic., Sep., etc.
Amentia (*a, and mens*, mind; *mental weakness*), 431
Ammonia, 966
Ammonium Bromidum, 238
„ Carbonicum, 170, 502, 829
„ Muriaticum, 829
Amorphous (*a*, priv. *and μορφη*, form; *shapeless*), 679
Amygdalæ (*tonsils*), 231
Amylaceous (*a, and μυλη*, a mill; *because made without a mill; pertaining to starch*), 335
Anacardium Orientale, 741
Anæmia (*αν*, and *αἱμα*, blood; *poverty of blood*), 345, 783; symptoms, 344; causes, 346; Consumption and, 346; treatment, 347, 696
Anæsthesia (*αν, and αισθανομαι*, I feel; *loss of sensibility*), 389
Anasarca (*general Dropsy*), 330, 350, 352, 503, 674
Anchylosis (*ανκυλη*, a curve; *stiffness from curvature of a joint*), 799
Aneurism, 506; varieties, 506; causes, 507; diagnosis, 507; treatment, 508; rest and limited diet, 508; recumbency, 509; change of climate, 510
Anger, effects of, 862
Angina pectoris, 409, 500
„ treachealis (*inflammatory Croup*), 519
Aniline, 725
Animal food, how to cook, 467
Ankles, sprain of, 1034; swelling of, 346, 352; weak, 991
Anorexia (*loss of appetite*), 592
Anthelmintics (worm-destroyers), 624
Anthrax (*Carbuncle*), 742
Antidotes, 954; *see also* Poisons, Part V.
Antigalactics, 991
Antimonium Crudum, 831
„ Tartaricum, 831
Antimony, 964; chloride of, 965
Antiseptics (*αντι*, against, *and σηπτος*, poison; *agents to counteract putrefaction*): Sulphurous Acid, 823; Charcoal, 859; Carbolic Acid, 120, 231, 232, 481, 578; Condy's Fluid or Chloride of Zinc, 481, 581
Antiseptic treatment of wounds, 761, 805
Anus (*the orifice of the rectum or lower bowel*), fissure of, 647; fistula in, 649; itching of, 657; prolapsus of, 658
Anxiety, effects of, *see under* Ign., Acon., Chin., Iod., Nux V., etc.
Aorta (*the main trunk of the arterial system, proceeding directly from the left ventricle of the heart*), 504

Aperients, 640
Aphasia (*α*, priv. *and φημι*, I say; *speechlessness from loss of memory or cerebral lesion*)
Aphonia (*α*, priv. *and φωνη*, sound; *speechlessness from inability to articulate*), 530, 992
Aphrodisiacs (*medicines which increase the sexual appetite*), 822
Aphthæ (Thrush), 111, 312
Apis Mellifica, 883
Apnœa (*α*, without, *and κνεω*, I breathe; *absent or insensible respiration*),789
Apocynum Cannabinum, 834
Apomorphia, 595
Aponeurosis (*απο, and νευρον*, a nerve; *tendinous extremity of a muscle*), 250
Apoplexy, 360; varieties, 360; modes of attack, 360; symptoms, 361; predisposition, 361; not often suddenly fatal, 372; causes, 363; diagnosis from Epilepsy and drunkenness, 363; treatment, 364; accessories, 365; preventives, 365; *see also* Section 238; derangement of, 992
Appetite, loss of, 592; voracious or depraved, 592, 622; derangement of, 992
Apyrexia (*an intermission between the paroxysms of a fever*)
Aqua Fortis, 967
Arcus Senilus, 781
Argentum Nitricum (*nitrate of silver*), 438, 441, 442, 444, 445, 450, 541, 580, 834
Arnica-bath, 837
,, Montana, 836
Arrowroot, 110
Arsenic, 957
,, and other poisoning in Ague, 213
Arsenical Wall-Papers, 959
Arsenite of Copper, 605
Arsenicum Album, 838
,, Iodide, 534
Artemesia, 394
Arterial bleeding, 807
Artesian wells, 56
Articular (*pertaining to joints*), 769
Asafœtida, 402
Ascaris lumbricoides (*long or round worms*), 619, 871
Ascites (*ασκος*, a leathern bottle; *abdominal Dropsy*), 351, 662, 673
Asiatic Cholera, 220; *see* Cholera
Asphyxia (*α*, without, and *σφυξις*, pulse; *suspended animation*), 331, 783, 789, 791; restoration of breathing, 789; restoration of warmth, 791
Assimilation (*assimilatio, the act by which living bodies appropriate and transform into their own substance matters with which they come in contact*), 36
Asthenia (*α*, and *σθενος*, force; *exhaustion*), 177, 783
Asthenic (*applied to diseases characterised by want of vigour*), *see* Sthenic
Asthenopia, 993
Asthma, 536, 993; pathology, 537; physical signs, 537; diagnosis, 538; causes, 539; diathesis, 540; prognosis, 540; treatment, 541; accessories, 543; prevention of, 545; climatic conditions, 545, 724
Asthma, hay, 517
,, of Millar, 388
Ataxy (*α*, without, *and ταξις*, order; *inability to control the limbs, etc.*), locomotor 375, 451
Atheroma (*αθηρα*, pulp; *fatty or granular degeneration of the blood-vessels*), 497
Atheromatous (*of the nature of Atheroma*), 779
Athletic sports, 67, 322, 706
Atmospheric influences and Diarrhœa, 632
Atonic (*α, and τονος*, tone; *debilitated*), 586
Atrophy (*α, and τροφη*, nourishment; *non-nourishment, wasting*), 111, 898
Atropine, 586, 842
Auscultation, 312, 812
Aura epileptica, 391
Aurum Metallicum, 844
Axilla (*the arm-pit*), 167

Back, aching pains in the, *see under* Crick-in-the-back, Lumbago, Piles, Rheumatism, Urine, etc.
Bags, spinal, hot-water, ice, 129
Baker's-itch, 717, 993
Balanitis (*βαλανος*, the glans penis, and *ιτης*, inflammation; *spurious Gonorrhœa*), 695, 993
Baldness, 753, 822, 858
Ball-room, 68; badly-ventilated, 62
Banting dietary, 776
Baptisia Tinctoria, 845
Barbadoes Leg, 293
Barber's Itch (*Sycosis*), 734
Bark, *see* China, 864
Barley-bread, 37; pearl, 109
Barley-water, 115
Baryta Carbonica, 846
,, Iodium, 485
,, Muriatica, 846
Bath, temperature of, 74; cautions, 74
,, blanket, 125

Bath, cold, 74, 492, 519, 529, 561, 569, 576, 601, 628, 651, 674, 686, 718, 720, 734
,, cold shower, 74, 405, 519, 689
,, foot, *see* hot or warm foot
,, hip, 667, 676
,, hot, 757; hot-air, 124; hot foot, 125, 528; vapour, 123, 384, 656, 674
,, sea, 75, 347
,, sea-salt, 75, 379, 414, 664
,, shower, *see* cold shower
,, sitz, 651; warm, 689
,, sponge, 152, 397, 689, 708
,, tepid, 472, 519, 651, 717, 718, 720, 757
,, Turkish, 76, 455, 459, 519
,, vapour, 123, 384, 656, 675, 689
,, warm, 76, 122, 341, 354, 387, 472, 523, 628, 656, 674, 689, 696, 701, 720; warm-foot, 747, 750; warm sitz, 689
Bathing, 73, 122, 302, 321, 408, 414, 436, 530, 565, 586, 729, 764
,, sea, 347, 379, 697
Beard, cultivation of, 536, 582
,, Acne of, 734
Bedrooms, airy, importance of, 60
Bed-sores, 121, 196, 993
Bed, wetting the, 687
Beef, essence of, 107; liquid, 106
Beef-tea, 523, 566, 589, 601, 606, 607, 614, 667
Bee-stings, 755
Belladonna, 846, 979; vapour of 135; difference between Aconite and, 846
Benzoic Acid, 688, 744
Beriberi, 355
Beverages, non-intoxicating, 49; demulcent, etc., 115, 139, 196, 613; for dyspeptics, 600; in fevers, 196
Bilious diarrhœa, 632; headache, 603
,, fever, *see* Remittent fever, 207
Bismuthum (*Subnitrate of Bismuth*), 605, 849
Bites and stings, 758; venomous and poisoned, 760
Black-eye, 799
Bladder, Inflammation of, 675; Irritability of, 675; stone in, 677, 681
Blanket bath, 125
Blankets in Rheumatism, 256
Blear-eyes, 472
Bleeding, how to arrest, 806; from the nose, 490; varicose vein, 514
Blindness, *see* Amaurosis, Cataract, etc.
Blinds and curtains, 64
Blistering-fly, 858
Blisters, 850
Blood diseases, 143
,, effused, 379
,, loss of, 587
Blood, vomiting of, 587
Blood-vessels in the aged, 779
Bloody-flux (*Dysentery*), 609
Boil (*Furunculus*), 741; Gum, 576
Boiling meat, 47
Bone, broken, 809; diseases of, 771, 994
Bones, caries of, 854; in old age, 778
Boots, thin-soled, 72; tight-fitting, 746; high-heeled, 72, 746
Borax, Glycerine of, 719
Bowels, confined, 639; Consumption of, 325; inflammation of, 607; relaxed, 630; falling of, 658; Spasm of, 636
Boxing the ears, 487
Brain, Concussion of, 793; Fever, *see* Typhus, 174; Inflammation of, 356
Brain-fag, 423; symptoms, 424; treatment, 424; accessories, 425
Brandy, etc., poison by, 975
Branny-tetter, 719
Bread, brown, its value, 34, 645; barley, 37; poultice, 130; puddings, 110; adulteration of, 110; as a vehicle for Cod-liver oil, 119
Breakfast, 30
Breast, Abscess of the, 235
Breast-pang (*Angina Pectoris*), 409, 500
Breath, shortness of, (*Dyspnœa*), 91, 310; *see also* Asthma, Bronchitis, Phthisis
Breath, offensive, etc.. 564
Breathing, 91; to restore suspended, 789
Bright's Disease, 671
Broken bone—leg, arm, rib, etc.—809
Bromide of Potassium, 733
Bromium (*Bromine*), 521
Bronchi (*the two tubes into which the trachea divides, opposite the third dorsal vertebra*), 233, 517
Bronchiole (dim. of βρονχος, the windpipe; *a minute bronchial tube*),
Bronchitis, acute, 531; chronic, 532, treatment, 533; accessories, 535; prevention, 535
Bronchocele (βρονχος, windpipe, *and* κηλη, tumour; *an enlargement of the thyroid gland*), 515
Bronchocele, Exophthalmic, 517, 670
Broth, chicken, 108; mutton, 108; veal, 108
Brow-ague, *see* Neuralgia, 408
Brown Bread, 34, 645
Bruise (*Contusion*), 798
Bruit (*an exaggerated heart-sound, heard by auscultation*), 254
Bryonia Alba, 850
Bubo (*a syphilitic swelling in the groin*), sympathetic, 185, 694

Buccinator muscle (*buccinare*, to sound the trumpet; *a muscle extending between the posterior portions of the alveolar arches and the lips*), 375
Bucnemia tropica, 293
Bug-bites, 754
Bullæ (*portions of the cuticle, detached by interposition of a watery fluid*, 245
Bunion, 747, 749
Burns and Scalds, 795, 890, 931, 948
Bursa, enlarged, 747
Bursæ mucosæ (*small closed sacs containing synovia to lubricate the surfaces over which the tendons of muscles play*), 250
Business, influence of, 77, 494
Butter, 40
Butyric (βους, ox, and τυρος anything coagulated; *relating to the essential fatty matter in butter; applied also to other oils, vegetable and animal, which, when rancid, give off a free, odorous acid*, 591

Cachectic Diarrhœa, 632
Cachexia (*bad habit of body*), 280, 943
Cactus Grandiflorus, 852
Cæcum, Inflammation of, 997
Cajeput Oil, 737
Caladium, 727, 728
Calcarea Carbonica, 852
Calcarea Phosphorata, 854
Calcareous degeneration, 364
Calculus (dim. *calx*, a stone; *a concretion occasionally formed in the bladder, etc.*), 677; diathesis, 677; varieties, 677; formation, 678; and torpid liver, 678; composition, 679; history, 679; in the female, 680; in boys, 681; symptoms, 681; surgical treatment, 682; prevention, 683; medical treatment, 684
Calendula Officinalis, 855
Calisthenics, 67
Callosity, 746
Calomel, 640
Camphor, 855
Cancer, 272; distinctions between malignant and non-malignant tumours, 275; constitution and cachexia, 272; varieties, 273; causes, 275; prognosis, 275; mode of death, 276; treatment, 276; operative measures, 280; of the stomach, 586
,, medullary or encephaloid, 274
,, Scirrhus, Encephaloma, differences between, 275
Cancrum Oris (*Canker of the mouth*), 565
Cannabis Sativa, 857
Cantharidine pomade, 858; lotion, 723
Cantharis Vesicatoria, 858, 985
Canthi (*the corners of the eye*) 853
Capillaries (*minute air-like blood-vessels, intermediately placed between the arteries and veins, and through which nutrition and secretion are performed*), 590
Capsicum Annuum, 594, 633, 654
Carbo-hydrate, (*carbo*, charcoal, and ὑδωρ, water: *a compound of these elements*, 335
Carbo Vegetabilis, 859; Animalis, 277, 733
Cabolic Acid, 120, 231, 232, 481, 578, 740, 744, 755, 760, 761, 770, 796, 808, 969; in burns, 796; in poisoned wounds, 760; perfumed, 139, 279, 565, 581, 719
Carbolic Soap, 730, 755
Carbonate of Ammonia, 502, 534; of lime, 852
Carbonic Acid and other poisonous gases, 985
Carbuncle, 185, 267, 742; with diabetes, 743
Carcinoma (*Cancer*), 272
Cardialgia mordens (*Heartburn*), 593
Caries (*ulceration of bone*), 855; of teeth, 569
Carlsbad water, 664, 666, 667, 684
Carotid Artery (καρος, stupor; *three arteries which carry blood to the head*), 454
Carriage exercise, 68
Carrot poultices, 130
Caseine (*caseus*, cheese; *the nitrogenised constituent of milk*), 41
Catalepsy (*a sudden loss of consciousness, during which the limbs remain in any position in which they are placed*)
Catamenial (*monthly*), 654
Cataract, 461; varieties, 461, 781; causes and objective symptoms, 461; subjective symptoms, 461; treatment, 460
Catarrh (κατα, downwards, and ῥεω, I flow; *discharge of fluid from a mucous membrane*), 115, 524
Catarrh, summer (*Hay Asthma*), 517
,, epidemic (*Influenza*), 241
,, bronchial, 524; with soreness, 887
,, of bladder (*Cystitis*), 675
,, nasal, 489
Catarrhal Ophthalmia, 434
Catheter (*a tubular instrument for emptying the bladder, etc.*), 691; on using of, 701
Caulophyllum, 860
Causticum, 861
Cauterisation, 38[3], 744

Cedron, 214, 215
Cerebral (*pertaining to the head or cerebrum*), 364
Cerebritis (syn. φρενιτις, *inflammation of the brain; but the latter term is often limited to inflammation of its membranes*), 364, 366
Cerumen (*cera*, wax; *an unctuous secretion which prevents the entrance of foreign bodies into the ear, and lubricates the meatus*), 486
Ceruminous (*producing cerumen*), 476
Cervical (*cervix*, neck; *belonging to the neck*), 231
Ceylon Teas, 52
Chafing of infants, 711
Chalk-stones, 265, 270
Chamomilla Matricaria, 862
Chancre, infecting and non-infecting, 282
Change of air, 198, 601
Chaps, 736
Charcoal poultices, 130
Cheerfulness of spirits, 408
Chelidonium Majus (*Greater Celandine*), 550, 662, 663, 667
Chemosis (χυμος, a humour; *œdema of the subconjunctival areolar tissue*), 439, 444
Chest compress, 128
,, for medicines, 97
Chicken Broth, 108
Chicken-pox, 156
Chigoe, 754
Chilblains, 736
Child-bed fever (*Puerperal*), 248
Child-crowing (*Croup*), 388
Children's fever, 886
Chimaphila Umbellata, 863
China (*Cinchona*), 864
Chin-cough (*Whooping Cough*), 234
Chin-whelk (*Sycosis*), 734
Chloasma, 754
Chloral Hydrate, 740, 866, 967
Chlorate of Potash, 230, 561
Chloric Æther, 500
Chlorodyne, as a palliative, 316
Chloroform liniment, 413
Chloroform, 978; inhalation of, 543
Chlorosis (χλωρος, green; *cachectic anæmia*) 317; definition, 347; symptoms, 349; causes, 349; treatment, 349; accessories, 350
Cholera, Asiatic or malignant, 220
,, English, 219, 743
,, sunlight and, 63, 64
,, differences betweeen Asiatic and simple, 220; cause, 222; symptoms, 222; treatment, 224; accessories, 224; preventives, 226; sanitary and hygienic measures, 226
Cholera and Camphor, 224
Cholesterine (χολη, bile, *and* στεαρ, suet; *a white, shining, inodorous substance, found in the blood, brain, and bile; it forms the basis of biliary calculi*), 665
Chordee, 693
Chorea, 397; symptoms, 397; causes, 398; treatment, 399; general measures, 399
Choroid (χοριον, the skin, *and* ειδος, resemblance; *parts resembling the corium, or skin, in vascularity*), 466
Churches, badly ventilated, 62
Churning, 40
Chylification (*chylus and facere*, to make; *formation of a nutritive fluid, extracted by absorption at the radicles of the chyliferous vessels from food that has passed through certain stages of digestion*), 118
Cicatrix (*the mark left after the healing of a wound*), 154
Cicuta Virosa (*Water hemlock*), 394
Ciliary (*cilium*, eyelash; *pertaining to the eyelashes or eyelids*), 940
Cimicifuga Racemosa, 867
Cina Anthelmintica, 870
Cinchona, 864
Cinnabaris, 908
Circulation, to restore, 791
Circulatory System, diseases of, 494
Cirrhosis (*Atrophy of the liver*), 662
Cisterns, cleansing of, 56
Cistus Canadensis (*Rock rose*), 723
Citrate of Iron, 349
Citrate of Lithia, 685
Clap (*Gonorrhœa*), 691
Clavicle (dim. *clavis*, a key; *the collar-bone*), 256, 327
Cleanliness, 80, 138, 740; in fevers, 183, 196
Clematis Erecta, 450, 473, 691
Clergyman's Sore Throat, 579
Clergymen's day of rest, 581
Climacteric (κλιμακτηρ, *a step; periods at which important changes occur, as puberty, or the menopausia*), 123
Climate, dry, 262, 270, 323, 354; change of, 510
Clinical Directory, Part VI.
Clinical thermometer, 83
Clothing, 70; uses of, 70; errors in, 70; colour of, 71; change of, 72; materials for, 303, 321; of children, 73; scanty, 526; warm, 414
Cocanic Ointment, 729
Coccus Cacti, 555, 557
Cocculus Indicus, 871
Cockroaches, 760
Cocoa, composition, uses of, 54; preparation of, 562, 600, 645, 689

Cod-liver oil, 117, 118, 262, 302, 326, 333, 471, 535, 566, 720, 730, 744, 767, 770; how to take, 119; in Scrofula, 302; as a Supplemental Diet, 302; in Consumption, 333; in Neuralgia, 413
Coffea Cruda, 872
Coffee, uses of, 52; injurious, 52; preparation of, 52; choice of, etc., 53; drinking, 593, 689
Colchicum Autumnale, 873, 970
Cold in the head, 524; excessive sensibility to cold, 529; depression from, 793; protection from, 414
Cold water in Dropsy, 354
Coldest part of the twenty-four hours, 786
Colic, 636; Lead, 638; pinching, 887
Collapse (*prostration or interruption of the powers and functions of life*), 219, 223
Collinsonia Canadensis, 874
Colliquative Diarrhœa (*colliquatio*, the act of melting; *wasting of solid parts, with increased liquid excretions*), 632
Collodion in Erysipelas, 247
Collyrium (κωλυω, I check, *and* ῥεω, I flow; *a wash for the eyes; eye-water*), 444
Colocynthis, 875
Colon (*the large intestine, commencing at the cæcum, and ending at the rectum; it is divided into the ascending, arch or transverse, and the descending colon*)
Colonial Fever, 845
Colonists, hints to, 65, 79
Coma (*lethargic sleep*), 177, 179, 673, 784
Coma-vigil, 177
Comacladia Dentata (*Caao*), 690
Compresses, wet, 127, 171, 435, 438, 444, 447, 458, 470, 579, 582, 646, 656, 664, 667, 669, 695, 730, 737, 740, 743
Concussion of the brain, 793
Condensed milk, 42
Condiments, 45
Condylomata (*warty excrescences of a syphilitic character*, 926
Condy's Fluid, 481, 581
Confined bowels, *see* Constipation, 609
Confluent (*con, and fluere*, to flow; *flowing together, as in certain exanthematous affections, in which the pustules coalesce*), 146
Congestion (*con, and gestum*, to carry; *excessive local fulness of the small blood-vessels*), 160; in Enteric fever, 193; of the liver, 661
Conium Maculatum, 876
Conjunctivitis (*inflammation of the lining membrane of the eyelids or front part of the eyeball*), 304, 433
Constipation (*con, and stipatum*, to cram close; *a state of the bowels in which evacuations are infrequent, hard, or difficult*), 111, 639; and Purgatives, 640; in the aged, 642; symptoms, 642; causes, 642; treatment, 643; accessories, 645
Constitutional diseases, 250
Consumption (*con, and sumptum*, to waste away; *progressive wasting; Phthisis*), 307, 553; of the bowels, 325; Anæmia and, 346
Contagion (*con, and tangere*, to touch *transmission by contact*), 149
Contamination (*contaminare*, to defile; *morbid pollution*), 167
Continued fever, 216
Contusion (*Bruise*), 798
Convalescence, 781; cautions in, 197
Conviviality and Gout, 263
Convulsions, after dentition, 887; infantile, 385, 887; treatment, 386; epileptic, 391; hysteric, 402; puerperal, 888; symptoms, 386
Cooking animal food, 46
Copaiba, 695
Copper, 964
Corallium Rubrum, 237
Corks, 100
Cornea, dimness of, 877; specks on, 1001
Corns, hard, soft, and inflamed, 746
Coronary arteries (*corona*, a crown; *two arteries arising a little above the sigmoid valves, and distributed over both surfaces of the heart*), 500
Corpulence, 774
Corrosive sublimate, 961
Corticle (*cortex*, bark; *relating to the outer covering or membrane*), 462
Coryza, causes, 524; symptoms, 524; treatment, 513; accessories, 528; dry treatment, 529; to diminish excessive sensitiveness, 529
Costiveness, *see* Constipation, 639
Cough, 554; treatment, 555; preventives, 561; arrest, 561; *see also under* Catarrh, Bronchitis, Phthisis, etc.
„ Whooping, 234
Coup de Soleil (*Sun-stroke*), 366
Cow-pox and vaccination, 153
Cracks in the skin, 736
Cream, 320, 413
Creosotum, *see* Kreasotum
Crepitation (*from crepitare*, to make a noise; *the grating noise or sensation occasioned by the friction of fractured bones*), 547, 809, 812

Cretinism, 64, 515
Cricket, 68
Crick-in-the-back, 869; neck, 256
Cricoid (κρικος, a ring, *and* ειδος, form; *a ring-shaped cartilage of the larynx between the thyroid and first ring of the trachea*), 804
Cross-bar swing, 322, 334
Crotalus, 205
Croton Tiglium, Croton-oil (*Oleum Crotonis*), 877
Croup, 230; inflammatory, 519; symptoms, 519; diagnosis, 520; dangers, 520; causes, 521; treatment, 521; accessory measures, 523; prophylactics, 524
Croup, spasmodic, 388; symptoms, 388; diagnosis, 388; causes, 388; treatment, 390; accessories, 390
Crural (*crus*, the thigh; *belonging to the thigh or lower limb*), 293
Crusta lactea (*Milk-crust*), 723, 731
Crypt (κρυπτω, I conceal; *a small secreting cavity in the skin or mucous membranes*), 121
Cuprum Aceticum, 878
,, Metallicum, 877
Curare, 377
Curcurbita Pepo, 625
Curvature, Pott's, 762
Curvature of the spine, Lateral, 765
Cutaneous system (*cutis*, skin; *belonging to the skin*), 163; diseases of, 710
Cuts, 808; *see also* Wounds, 805
Cyanogen (κυανος, blue, *and* γενναω, I generate; *an ingredient in Prussian blue*), 203
Cyanosis, (κυανος, blue, and νοσος, disease; *blueness of the complexion from malformation of the heart, and consequent admixture of venous with arterial blood*), 225
Cyanotic (*relating to Cyanosis*), 225
Cynanche tonsillaris, 582
Cyst (*a pouch or sac*), 770
Cystitis (κυστη, a pouch, *and* ιτης, inflammation; *inflammation of the bladder*), 675, 676, 686, 796

Damp, affections from, 251, 332, 435, 486, 521, 585, 602, 611, 637, 673, 736, 881
Dandriff or Dandruff (*from two Saxon words meaning* itch *and* foul; *an itching scurfiness, chiefly affecting the scalp, as in Pityriasis, and Psoriasis capitis*), 719, 754
Darkening the sick-room, 64
Dead, how to restore the apparently, 780
Deadly Nightshade, 979
Deaf-Dumbness, 482
Deafness, 482; varieties and causes, 482; diagnosis, 483; prognosis, 484; treatment, 485; general hints, 486
Death, painless, 787
Debility, 308, 409; and fainting, 501; *see also* Emaciation
Decay, Senile, 777
Defective Hearing, 781
Deformity, angular, of the spine, 762; causes, 763; diagnosis, 763; symptoms, 764; terminations, 764; treatment, 764
Degeneration (*de, and genus, generis*, unlike one's ancestors; *a change for the worse—degradation—in the intimate composition of the solids or fluids of the body*), 364; calcareous, 364
Delirium Tremens, 550, 975; *also under* Bell., Hyos., Opi., etc.
Dementia, 427
Demodex folliculorum, 732
Demulcent beverages, 115, 561
Demulcents (*demulceo*, I soften; *medicinal agents which modify the effects of irritating matter on the sensitive surfaces over which it has to pass*), 564
Dengue, 218
Dentition, 569; convulsions after, 568
Depression from Cold, 793
Depression of spirits, *see under* Ars., Ign., Merc., Plat., etc.; *also* Hypochondriasis, Liver Complaint, etc.
Derbyshire-neck, 64, 515
Dessert, 32
Desquamation (*de, and squama*, a scale; *scaling of the skin*), 149
Detergent (*detergere*, to cleanse; *a medicine which has the power to cleanse wounds, etc.*), 292
Diabetes, 335; pathology, 335; symptoms, 336; test, 337; cause, 338; prognosis, 338; duration, 339; treatment, 339; accessories, 340; skim-milk treatment, 341; dietary, 342; with Carbuncle, 743
Diagnosis (*distinguishment, by signs and symptoms, of one disease from another*), 229
Diaphoresis (δια, through, *and* φορεω, I convey; *increased perspiration*), 535
Diaphragm (δια, *and* φρασσω, I close; *a muscle which separates the thoracic and abdominal cavities*), 334, 593
Diarrhœa (δια, *and* ῥεω, I flow), 630; symptoms, 631; causes, 631; treatment, 632; diet, 635; accessories, 536; injections in, 134

Diastole (*δια*, and *στελλω*, I send; *dilatation of the heart and arteries upon the entrance of blood*), 497
Diathesis (*constitutional disposition*), 677
Diathetic (*constitutional tendency*), 161
Diet, sick, 105; full, 112; middle, 113; broth, milk, low, 114; children's, milk, 113; stimulants and, for sick, 140; in fevers, 196; in water-brash, 604; scale of, for children, 627
Dietary, plan of, 28; circumstances regulating, 29; meals, 30; in public institutions, 112; Banting, 776
Difficult breathing, 91, 310; *see also* Breath
Digestion, physiology of, 589
Digestive system, Diseases of, 561, 845
Digital (*digitus*, a finger; *pertaining to the fingers*), 745
Digitalis Purpurea, 878
Diluents (*diluo*, to dilute; *substances which increase the proportion of fluids in the blood, secretions, and excretions, and render them less viscid*), 691
Dinner, 32; late, 32
Dioscorea Villosa, 879
Diphtheria, 227; symptoms, 228; diagnosis, 229; sequelæ, 229; treatment, 230; fumigation, 233; accessories, 234; preventives, 234
Diphtheria and Croup, differences between, 230
Diphtheria, Laryngeal, 232
Diphtheritic Paralysis, 229, 376
Diplopia (*διπλοος*, double, *and οπτομαι*, I see; *an affection of the sight in which objects appear double*), 455
Directions about medicines, 101
Directions on nursing, 136, 195
Directory, Clinical, *see* Part VI.
Disease, signs and symptoms of, 82
Diseases, general, 143; miscellaneous, 762
Diseased animal food, 631
Disinfectants—Sulphurous Acid, Carbolic Acid, Chloride of Lime, Condy's Fluid, Burnett's Fluid, Perfumed Carbolic Acid, etc.
Disinfection, 183, 198
Dislocation, 813; of the shoulder, 814; of the elbow, 815; of the hip, 815; of the knee, 817
Disorders of teething, 567
Disposition in which to eat, 601
Distal (*di, and sto*, I stand apart; towards the extremity), 468
Diuretic (*δια, and ουρεω*, I pass the urine; *having the property of increasing the secretion of urine*), 36
Dizziness (*Vertigo*), 602
Dogs and tape-worms, 628
Dorsum ilii (*the posterior surface of the haunch or hip-bone*), 769
Dose, 101; repetition, 103; over-dose, 954
Douche, eye, 457; cold, 379
Drainage, imperfect, 229
Drainage of houses, etc., 65
Drains, flushing of, 199
Dressings, dry, 132
Drinking-water, 55; impure, 623, 632
Drinks, demulcent, 115, 139
Dropping tinctures, 102
Dropsy, 350; character of swellings, 352; symptoms, 352; treatment, 352; accessories, 354; of the abdomen, 662; after Scarlet-fever, 172, 671; acute renal, 672
Dropsy of the brain, 369; treatment, 370
Drosera Rotundifolia, 880
Drowning, apparent death from, 789
Drugs, hurtful, 640
Drunkard's vomiting, 841
Drunkenness, crusade against, 49
Drunkenness *v.* Apoplexy, 363, 971, 973
Dry fomentations, 132; dressings, 132
Dry tetter, 719
Dulcamara, 881
Dumb-Ague, 213
Duodenitis, 609
Duodenum (*duodeni*, twelve; *anciently supposed to be twelve fingers' breadth long; the first portion of the small intestines beginning from the pylorus*), 336
Dura Mater (*a fibrous, thick, white, semi-transparent and resisting membrane, which lines the cranium, and protects the brain and marrow; it was the supposed origin of every other membrane*), 393
Dwellings, healthy, 65; and epidemics, 65; overcrowded, 65
Dying, modes of, 783
Dynamic (*pertaining to strength; applied to the influence of agents on the body, not explicable by mechanical or chemical causes*)
Dys- (*a prefix to many words denoting disordered or performed with difficulty*, as Dyspepsia, *difficult digestion*)
Dyscrasia, *or* Dyskrasia, (*a morbid constitutional tendency*), 853
Dysentery (*δυς, and εντερον*, intestine; *inflammation of the mucous membrane of the large intestine*), 609; symptoms, 610; causes, 611; treatment, 611; accessories, 613; chronic, 613; preventive measures, 614

Dyspepsia (*Indigestion*), 589, 845; physiology of digestion, 589; forms of indigestion, 591; symptoms, 591; causes, 593; treatment, 594; accessories, 596
Dyspnœa (*δυς, and πνεω*, I breathe; *difficult breathing*), 91, 310; *see also* Breath
Dysuria (*δυς, and ουρέω*, to make water; *pain and difficulty in discharging urine*), 1038

Early closing and Health, 356
Early rising, 435
Ears, Diseases of, 474
,, Abscess of external meatus, 475
,, Absence of wax in, 477
,, Accumulation of wax in, 476
,, Boxing of, 487
,, Foreign bodies in, 801
,, General Hints on, 486
,, Inflammation of external meatus of, 474
,, Inflammatory and Catarrhal Ear affections, 477
,, Inflammation of Membrana Tympani of, 477
,, Perforation of Membrana Tympani of, 478
Ears, Inflammation of Mucous Membrane of the Tympanum, 477
,, Running from, 480
Eating too quickly and frequently, 593; disposition suitable for, 601
Ecchymosis (*discoloration under the skin*), 200, 799
Ecthyma, 1006
Ectozoa (*εκτος*, outside, *and ζωον*, an animal; *parasites infesting the exterior of the body*), 618
Ectropium (*Eversion of the eyelid*), 471
Eczema, 723; symptoms, 724; varieties, 724; causes, 725; pathology, 726; treatment, 726; accessories, 729
Eczema Palpebrarum, 472
,, Pustular, 731
Effete (*worn out, decayed*), 591
Efflorescence (*e*, forth, *and florescere*, to bloom: *a cutaneous blush, or eruption*), 167
Effluvia (*exhalations, vapours, etc.*), 631
Effusion (*the secretion of fluid vessels, as the lymph or serum, on different surfaces; or the escape of a fluid out of its natural viscus*), 551
Eggs, value, preparation, freshness, preservation of, 39
Egyptian or contagious Ophthalmia, 436
,, Sarcocele, 293
Ekzema, *see* Eczema
Elbow, dislocation of, 815
Electricity, 379, 400, 414, 455, 530, 574, 711, 738, 768, 789
Elephantiasis Arabum, 293
,, Græcorum (*Leprosy*), 293
,, Scroti, 293
Emaciation (*emaciare*, to grow lean), 171, 310; *see also under* Ars. Iod., China, Merc., etc.
Emanation (*emanare*, to issue or flow from; *a body which draws its origin from another body; as, miasm, from decomposing animal or vegetable matter*), 195
Embolism, 510, 784
Embolus (*εμβολη*, a wedge; *a coagula or clot plugging a blood-vessel*, 452
Emetic, 818, 964, 973
Emissions, *see* Spermatorrhœa, 702
Emotional disturbances, *see under* Acon., Bry., Cham., Chin., Ign., Nux, etc.
Emphysema (*εμφυσαω*, I inflate; *a swelling caused by air in the cellular tissue*), 352, 538
Employments, why unhealthy, 78; posture in, 79
Emprosthotonus (*εμπροσθεν*, forwards, *and τεινω*, I stretch; *a drawing forward of the body by permanent muscular contraction*), 381
Empyema (*εν, and πυον*, pus; *pus in the pleura*), 551
Empyreumatic (*belonging to Empyreuma, the burnt smell and acrid taste or volatile products of animal or vegetable substances when decomposed by heat. The cause of the smell, the "empyreumatic" oil, does not exist in the substance, but is the result of its decomposition*), 53
Emulsion (*oil, divided and held in suspension in water by means of mucilage*), 39, 326
Encephalitis, 356; causes, 356; diagnosis from Tubercular Meningitis, Delirium Tremens, and Enteric Fever, 357; symptoms, 358; treatment, 359; accessories, 359
Encephaloma (*soft Cancer*), 275
Enchondroma (*εν, and χονδρος*, a cartilage; *an abnormal cartilaginous growth*), 940
Endemic (*applied to diseases peculiar to the inhabitants of particular localities or countries; native diseases*), 355, *see also* Epidemic
Endocarditis *ενδον*, within, *and καρδια*, heart; *inflammation of the membrane which lines the interior of the heart*), 253, 497

Enemata, 133–5, 183, 624, 646, 656
English Cholera, 219, 634
Enlargement of the glands: of the liver, 661; of the spleen, 212; after Measles, 157; after Scarlet Fever, 172; scrofulous, 306
Enteralgia (*εντερον*, intestine, *and αλγος*, pain; *pain of the intestines; colic*), 412
Enteric fever, 185, 845; diagnosis from Typhus-fever, 186; cause of, 186; pathological peculiarities of, 187; symptoms, 188; eruption, 190; temperature, 190; dangers, 191; mortality, 193; treatment, 193; accessories, 195; moderation in convalescence, 197; prevention of, 198; sequelæ, 195
Enteritis (*εντερον*, intestine, *and ιτης*, inflammation; *inflammation of the bowels*), 608, 668
Entophyta (*εντος*, within, *and φυτον*, a vegetable; *vegetable parasites growing within the body,*), 618
Entozoa (*εντος*, within, *and ζωον*, an animal; *parasites within the body*), 618
Entropium (*Inversion of the eyelid*), 471
Enuresis (*Incontinence of urine*), 687
Ephemera (*επι*, on, and *ἡμερα*, a day; *diseases lasting but for a day; transient*), 722
Epidemic (*applied to diseases due to a temporary cause, and prevalent in a district, but not native*), 199; *see* Endemic
Epidermis (*the thin external layer of the skin—the cuticle*), 746
Epididymitis, 1006
Epigastric (*pertaining to the epigastrium or region of the stomach*)
Epilation (*loss of hair*), 735
Epilepsy, 390; symptoms, 392; causes, 392; treatment, 393; consequences, 392; accessories, 396; when feigned, 397, 410
Epiphyta (*επι*, upon, *and φυτον*, a plant; vegetable parasites growing on the surface of animals), 618, 753
Epistaxis (*επι, and σταζω*, I flow drop by drop; *hæmorrhage from the nose*), 160, 490
Ergotism (*poisoning by ergot*), 463
Erigeron Canadense, 612
Eructations, *see* Dyspepsia, Pyrosis, Flatulence, etc.
Eruptions, 710; *see also* Skin
Eruptive fevers, 144
Eryngium æquaticum, 285, 709
Erysipelas, 244; symptoms, 244; terminations, 245; dangers, 245; causes, 245; prognosis, 245; treatment, 246: accessories, 247
Erythema (*ερυθρος*, rose-coloured; *a nearly continuous, non-contagious, partial redness of the skin, with constitutional disorder*), 710, 736
Escharotic (*any substance which, applied to a living part, gives rise to a slough, or scab*), 383
Essence of beef, 107, of chicken, 108
Essential salt of lemons, 969
Ether, 978
Etiology (*αιτια*, cause, *and λογος*, a discourse; *the science which treats of the causes of diseases*), 394
Eupatorium Perfoliatum, 881
„ Purpurea, 882
Euphrasia Officinalis, 883
Eustachian tube (*an osseo-cartilaginous tube, about two inches long, which conveys air from the pharynx to the tympanum*), 478
Eversion of the eyelids, 471
Exacerbation (*a periodic increase of febrile symptoms*), 181, 311
Exanthemata (*eruptive diseases*), 144
Excess in the pleasures of the table, 263, 397
Excesses, sexual, 394, 397, 408
Excitement, 1007
Excoriations, 711
Exostosis (*εξ, and οστεον*, a bone; *a tumour at the surface, or in the cavities of bones*), 287
Excrescences (*preternatural growths*), *see* Diseases of the Cutaneous System
Exercise, 66, 268, 269, 302, 322, 333, 344, 347, 379, 408, 414, 418, 436, 447, 460, 505, 529, 545, 561, 565, 602, 636, 645, 667, 675, 669, 715, 740; times for taking, 68; gymnastic, 67, 322; philosophy of, 68
Exertion, excessive, 817, 837
Exhalent (*ex, and halare*, to breathe; *that which exhales, or throws out*), 127
Exhaustion, muscular, from over-exertion, 817, 837
Exposure, unnecessary, 79
Exophthalmia (*εξ*, out of, *and οφθαλμος*, eye; *a morbid protrusion of the eye from its orbit*), 517
Exophthalmic Bronchocele, 517
External remedies for medicine-chest, 100
Extract of meat, Liebig's, 107, 244, 248

Eye, diseases of, 433; black, 799; douche for, 457; foreign bodies in, 801; shade for, 457; spots before, 453, 459
Eyes, over-use of, 460, 468; of the aged, 781
Eyelids, granular, 438; heaviness of, 471; stye on, 471; inflammation of, 470; inversion of, 471; eversion of, 471

Face-ache, *see* Neuralgia, 408; *and* Toothache, 569
Facial Neuralgia, *see* Neuralgia, 408
,, Paralysis, 375
Fainting-fit (*Syncope*), 501
Falling of the bowel, 658
Falling-sickness (*Epilepsy*), 390
Falls and stuns, 798, 794
False Measles (*Roseola*), 712; Pleurisy (*Pleurodynia*), 551
Famine-fever, 199
Farinaceous food, 108, 564, 569, 609
Fasciæ (*fascia*, a band; *the fibrous membrane, of various extent and thickness, which invests and supports soft and delicate parts of the body*), 250, 512
Fatigue, muscular, 817; *see also under* Arnica; mental, *see under* Nux Nom., Ac.-Phos., etc.
Fatty food in Neuralgia, 413
Favus, 754
Feather-beds, 601, 656
Febricula (*a short mild fever*), 216
Feeding of infants and children, 563, 564, 569, 627, 689
Feet, aching and soreness of, 836; care of, 80; perspiration of, 939; swelling of, *see* Œdema, 350
Felon (*a malignant Whitlow*), 744
Femur (*thigh-bone*), 327
Femoral (*pertaining to the femur*)
Ferrum, 883
Ferri Perchlor., 316, 746
Ferrum Aceticum, 316, 347
,, Iodidum, 370, 300, 883, 633
,, Muriaticum, 883
,, Phosphoricum, 884
,, Redactum, 883
Fester, 1010
Fever, Brain (*Typhus*), 174; Causes, 180; Children's, 886; Colonial, 845; Enteric, 185; Eruptive, 144; Famine (*Relapsing*), 199; Gastric (*Enteric*), 186, 845; Hay, 517; Hectic, 311; Intermittent, 209; Jungle, 207; Low, see Typhus; Puerperal, 248; Putrid, 174; Relapsing, 199; Remittent, 207: Rheumatic, 250; Scarlet, 144, 672; Simple, 216; symptoms, 175; Typhoid, 185; Typhus, 174; Yellow, 202
Fever, Typhus and Enteric (*Typhoid*), differences between, 177; unfavourable indications, 179; nervous symptoms, 179; causes, 180
Feverishness, *see under* Acon., Cham., Gels., Ver.-Vir., etc.
Fibroma (*fibrous Tumour*), 1010
Fibula (a clasp; *the small outer bone of the leg*), 329
Filix Mas (*Male-fern*), 394, 625
Finger, gathered (*Whitlow*), 744
Fish, 44
Fissure and Ulcer of the Rectum, 647; pathology, 647; causes, 648; symptoms, 648; treatment, 648; accessories, 649
Fistula in ano, 649
Fits, *see* Ague, Apoplexy, Convulsions, Epilepsy, Fainting, Hysteria
Fits of infants, 385
Flannel, 70, 240, 262, 267, 368, 667, 675, 715, 792
Flannel, hot, 249, 609
Flatulence (*flatus, from flare*, to blow; *air generated in the stomach, or other cavities of the body*), 111, 592
Flea-bites, etc., 756
Flesh, proud, 742
Flour in burns, 797
Fluoric acid 819
Flushing after food, 711
Flux, bloody (*Dysentery*), 609
Fœtid breath, 564
Follicle (dim. of *follis*, a bag)
Fomentations, 132, 701, 759
Fomites (*clothing, etc., retaining infectious particles*), 158, 168
Fontanelles (*the spaces occupied by a cartilaginous membrane in the head of an infant at the union of the various cranial bones*), 327, 369, 370
Food, various articles of, 37; farinaceous, 108; Neave's, 111; for the aged, 784; for children, 627; for diabetics, 342; for dyspeptics, 598; for invalids, 105; for the scrofulous, 302; indigestible, 631; not to be kept in sick-room, 139
Foot-bath, *see under* Bath
Foreign bodies in the eye, 801; ear, 801; nose, 802; larynx, pharynx, etc., to extract, 803
Formulæ, 1043
Foxglove, 983
Fracture (*broken bone*), 809
Fracture of the limbs, 809: of the skull, 810; of the clavicle, 811; of the ribs, 811; dislocation and, 813

Frænum linguæ (*frænum*, a bridle; *a triangular fold of the mucous membrane between the lower paries of the mouth and lower surface of the tongue, which it keeps in place*), 578
Freckles, 736
Frictions, 262, 321, 333, 379, 397, 414, in Constipation, 646; olive oil, 239
Friedrichshall water, 684
Fright, effects of, *see under* Chorea, Epilepsy, Acon., Ign., Opi., etc.
Frog (*Thrush*), 562
Frost-bite, 737
Fruit (*dessert*), 32
Fruits for invalids, 116
Fumigation (*fumigatum*, to make smoke; *filling a circumscribed space with gas or vapour, to purify, perfume, or charge it with a medicinal agent*), 153
Fungi, poisonous, 984
Fungoid excrescences (*proud flesh*), 742
Furunculus (*Boil*), 741

Galium Aparine, 278
Gall-stones, 666
Gallic Acid, 315, 318
Galvanism, 379, 400
Gamboge, 658
Game, 43
Ganglion (γαγγλιον, a knot; *an encysted tumour*), 774
Gangrene (*mortification*), 246, 549
Gargle, 578, 581, 584, 821, 893, 924
Gases, poisonous, 985
Gastralgia (γαστρο), stomach, *and* αλγος, pain; *impaired appetite, with gnawing or burning pain in the stomach*), 585, 602, 636, 729
Gastric (*pertaining to the stomach*), 237
Gastric (*Enteric*) fever, 185
Gastrodynia (*spasmodic or neuralgic pain in the stomach*), 409, 602, 1011
Gastritis (*inflammation of the stomach*), 585
Gathered breast (*mammary abscess*), 771; finger (*Whitlow*), 744
Gelseminum Sempervirens, 885, 981
General diseases, 143
Genuine medicines, 100
Giddiness (*Vertigo*), 303, 602, 886
Gin colic, 668
Gin-drinker's liver, 662
Ginglymoid (γιγγλυμος, a hinge; *joints which admit of motion in two directions only, as the knee, the elbow*)
Glairy (*resembling the white of an egg*), 234
Gland (*glans*, an acorn, or kernel; *secretory vessels, generally soft and globular, which extract molecules from the blood to form new fluids. Some have reservoirs in which the fluids undergo certain changes before entering the excretory ducts*), 162; lymphatic, disease of, 306
Glandular swellings, after Measles, 162; after Scarlet fever, 172; scrofulous, 306; of the liver, 661; of the spleen, 212
Glaucoma (γλαυκος, sea-green; *visual opacity, accompanied by a greyish or greenish spot*), 464; causes, 464; symptoms, 465; treatment, 466; accessories, 466
Gleet (*discharge from the urethra*), 694, 700
Globules, 98
Globus hystericus, *see* Hysteria, 400
Glonoine, 888
Glossitis (*inflammation of the tongue*), 577
Glycerine, 120, 719, 720, 723, 730, 737, 744, 797
Glycosuria (γλυκυς, sweet, and ουρον, urine), 338
Gnat stings, 758
Goître (*Derbyshire-neck*), 515; causes, 515; and limestone, 515; treatment, 516; accessories, 516; and sunlight, 63
Gold (*Aurum*), 844
Gonorrhœa (*a contagious discharge from the male or female urethra*), 691; symptoms, 692; complications, 693; causes, 694; treatment, 695; accessories, 697; preventives, 698
Gonorrhœal Ophthalmia, 444
Goulard-water, 711
Gout, acute, 262; causes, 263: symptoms, 266; diagnosis, from Rheumatism, 266; complications, 267; treatment, 271; accessories, 268; preventives, 268, 677; incomplete, 724
Gout, chronic, 270, 686
Gouty deposits, 270, 271
Gouty kidney, 672
Grand mal, le, 392
Granular eyelid, 472
Granular kidney, 672
Graphites (*Plumbago*), 889
Gravedo (*Cold in the head*), 524
Gravel (*small calculous concretion in the kidneys*), 677
Gravel soil for a residence, 65

Green sickness (*Chlorosis*), 347
Grief, effects of, *see under* Ign., Acon., China, etc.
Gripes, 636, 638
Grubs, *see* Maggot-pimple, 731
Gruel, 113
Guaco milk, 762
Guaiacum, 261
Guinea-worm, 629
Gum-boil, 576
Gum-rash, red, 718; white, 718
Gum-water, 115
Gunpowder in the eye, 801
Gun-shot wound, 805
Gutta serena (*complete Amaurosis*), 451
Gymnastic exercises, 67, 302, 322

Habits, 601
Hæmatemesis (*ἁιμα*, blood, *and* εμεω, I vomit; *a vomiting of blood*), 351, 587, 812; treatment, 587; diagnosis from Hæmoptysis, 588; accessories, 588
Hæmoptysis (*ἁιμα*, blood, *and* πτυω, I spit; *hæmorrhage from the lungs*), 309
Hæmorrhage (*ἁιμα*, blood, *and* ῥηγνυμι, I break forth; *a discharge of blood from vessels destined to contain it*), 195; to arrest, 807; from lungs, 309; from stomach, 586, 889; from a varicose vein, 512; vicarious, 588; cerebral, 452
Hæmorrhoids (*bleeding piles*), 651; varieties, 652; symptoms, 652; causes, 653; treatment, 654; accessories, 655
Hair falling off (*baldness*), 753, 822, 858; *see also* Alopecia
Hamamelis Virginica, 889
Hands, chapped, 736; coldness of, 887
Hand-feeding of infants, *see* Infants
Hartshorn, 966
Harvest-bug bites, 754
Hay-Asthma, or Hay-Fever, 517
Headache, Nervous Sick, 415; symptoms, 415; causes, 416; treatment, 416; accessories, 417; preventives, 418
Headache, Bilious, 603; with dizziness, 886; Sick, 416
Head affections, *see* Diseases of the Nervous System, 357; *also under* Dyspepsia, Catarrh, etc.; *and* the Materia Medica, *especially under* Acon., Bell., Bry., Gels., Glon., Nux Vom., *and* Ver.-Vir.
Health, observations pertaining to, 27; and occupations, 77
Healthy dwellings, 65, 323
Hearing, defective, 781
Heart, 779; enlargement of, 498
Heart complications in Rheumatism, 253
Heart, Diseases of the, and its membranes, 494; Consumption and, 313; Palpitation of, 502; organic and functional disease of, 503; weakness of in the aged, 779
Heartburn, 593
Heat-spots, 725
Hectic fever (*a remittent fever with daily paroxysms*), 311
Height and weight, aids to diagnosis, 311
Helleborus Niger (*Black Hellebore*), 891
Helonias Dioica, 891
Hemicrania (*ἡμι*, half, *and* κρανιον, skull; *pain limited to one side of the head*), 408
Hemiopia (*ἡμι*, *and* οπτομαι, I see; *depraved vision in which only one half of the object is seen*), 430
Hemiplegia (*ἡμι*, *and* πλησσω, I strike; *paralysis of one side of the body*), 372, 498
Hepar Sulphuris, 891
Hepatic (*pertaining to the liver*) Congestion, 661; Neuralgia, 409
Hepatitis (*ἡπαρ*, liver, *and* ιτης, inflammation; *Inflammation of liver*), 659
Hepatization (*conversion into a texture resembling that of the liver*), 547
Heptalgia (*pain in the liver*), 662
Hernia (*ἑρνος*, a sprout, *rupture; protrusion of a viscus from its natural cavity*), 614; varieties, 614; treatment, 615
Herpes (*ἑρπω*), I creep; *a spreading eruption*), 721
Heterogeneous (*dissimilar in kind, opposed to homogeneous*, 637
Hiccough (*Singultus*), 593
Hints to the reader, xi.
Hip, dislocation of, 815
Hip-joint, disease of, 769
Hippuric (*ἱππος*, horse, *and* ουρον, urine; *an acid found in the urine of the horse*), 254
Hoarseness, 530; and Croup, 519
Hobbies, interesting, 397
Hobnailed liver (*cirrhosis*, κιρρος, yellow; *a morbid yellow secretion in the tissues*), 662
Homœopathic (*according to the law of similars; pertaining to Homœopathy*)
Homœopathy (*curing disease by drugs which, given to healthy persons, in sufficient doses, are capable of producing conditions or symptoms similar to those of the disease to be cured*), not a mere system of dieteties, 28

Homogeneous (*of the same family or race; substances possessing the same properties*)
Hooping-cough, *see* Whooping-cough, 234; pathology, 235; cause, 235; diagnosis, 235; symptoms, 236; complications, 237; treatment, 237; accessories, 239
Hordeolum (*Stye*), 471
Hornet stings, 758
Horrilipation, 88
Horseback exercise, 319, 322, 418, 423, 667
Hot-air bath, 124
Hot foot-bath, 125
Hot baths, 125
Hours for taking medicines, 102
Housemaid's Knee,, 747
Humerus (*a cylindrical, irregular bone, forming the upper part of the arm*), 329
Hunger, excessive after fever, 197
Hunger Pest (*Relapsing fever*), 200
Hunting-field, 68
Hydr.-præcip.-rubr., 489, 727
Hydrastis Canadensis, 892
Hydrate of Chloral, 607, 746, 866, 979
Hydrocele (*dropsy of the testicles*), 351
Hydrocephalus, 890; Acute, 300, 303; ,, Chronic, 296, 307, 351, 361, 369; symptoms, 369; causes, 370; treatment, 371; prevention, 371
Hydrochloric acid (*Muriatic acid*), 820, 967
Hydrocotyle Asiatica, 292, 294
Hydrocyanic acid (*Prussic acid*), 980
Hydropathic applications, 122, 125, 127, 196, 645, 656, 660, 664
Hydro-pericardium (*dropsy of the membrane of the heart*), 351
Hydrophobia, 381; symptoms, in dog, 381; in man, 382; cause, 383; treatment, 383; precaution, 385; mortality, 385
Hydrops Articulorum (*dropsy of the joints*), 350
Hydrothorax (*ὑδωρ*, water, *and θωραξ*, chest; *Dropsy of the chest*), 351, 551
Hygiene (*science of health*), 27
Hygienic observations, 27
Hygrometric, 633
Hyoscyamus Niger, 894
Hyperæmia (*ὑπερ*, in excess, *and αἱμα*, blood; *local excess of blood*), 314, 713
Hyperæsthesia (*ὑπερ, and αισθησις*, the faculty of feeling; *excessive or morbid sensibility*), 453
Hyperinosis (*ὑπερ, and ις, ινος*, fibre, *and ωσις*, disease; *excess of fibrine in the blood*)
Hypermetropia (*ὑπερ, μετρον*, measure, *and οψις*, vision; *excessive sight*), 467
Hypertrophy (*ὑπερ, and τροφη*, nourishment; *enlargement of parts from increased activity of nutrition*), 498; *see also* Atrophy
Hypnosis (*deficient fibrine in the blood*), 832
Hypnotic (*ὑπνος*, sleep; *that which produces sleep*), 421
Hypochondriac (*pertaining to the hypochondrium or upper lateral third of the abdomen—below the false ribs; also applied to a person suffering from Hypochondriasis*), 406
Hypochondriasis, 406; symptoms, 406; causes, 408; treatment, 407; accessories, 407, 408
Hypodermic (*under the skin*), 279
Hypogastric (*pertaining to the hypogastrium or lower portion of the abdomen*)
Hysteria, 400; causes, 401; symptoms, 401; diagnosis, 402; treatment, 402; accessories, 404, 686
Hysterical Paralysis, 376

Ice, 121, 233, 585, 587, 588, 606
Ice injurious to the teeth, 576
Ichor (*vitiated humours*), 185
Icterus (*Jaundice*), 665
Idiocy, 428; and Cretinism, sunlight and, 64, 515
Idiopathic (*ιδιος*, peculiar, *and παθος*, affection; *applied to a primary disease, or an inherent morbid state, not depending on any other disease*), 244, 380
Ignatia Amara, 895
Impaction (*impactum*, driven in; *a collision, a wedging in*), 666
Impairment of vision (*Amblyopia*), 458
Impetigo, 731
Impure air a cause of Scrofula, 296
,, water, 623, 632
Incontinence of urine, 687; causes, 687; diagnosis, 687; treatment, 688; accessories, 689
Incubation (*in*, upon, *and cubo*, I lie down; *period of development, as that between the reception of a disease and the occurrence of symptoms*), 166
Incubus (*Nightmare*), 593
Indigestible kinds of food, 599, 631
Indigestion (*in, and digestum*, set in order; *Dyspepsia*), 589
Idiosyncrasy (*ιδιος, συν, and κρασις*, mixture; *a constitutional peculiarity which renders one person susceptible to influences that are powerless with others*), 193

Indiscretion, social, 532
Industry and the passions, 706
Infantile Convulsions, 385
„ Paralysis, 374
Infants, food for, 111; feeding of, 562, 569
„ fits of, 385
„ soreness of, 711
Infection (*the propagation of a poison by diffusion through the atmosphere*); from bad ventilation, 62
Inflammation, of the bladder, 675; bowels, 608; brain, 356; ear, 474, 477, 479; lungs, 546; mouth, 561; peritonæum, 668; stomach, 595; tongue, 577; throat, 846; veins, 510
Influence of professions and occupations on health, 77
Influenza, 241; diagnosis, 243; symptoms, 243; accessories, 243; complications, 244
Ingesta (*in, and gestum*, borne or carried; *food ingested or taken into the stomach*)
Ingrowing of nail, 746
Inguinal (*pertaining to the groin*), 898
Inhalation, 135, 179; of Kreasote, 535
Injections, 133; in Constipation, 646; Fistula, 651; piles, 656; worms, 624
Injuries, 789
Innominate artery (*in*, without, *and nomen*, a name; *the trunk ascending from the aorta along the trachea, and dividing into the right subclavian and the right primitive carotid*), 497
Inoculation (*inoculare*, to ingraft; *introducing the virus of a disease by means of a puncture in the skin*), 153
Insanity, 428; causes, 429; symptoms, 429; imbecility and, 410
Insects, stings of, 758
Insolation (*Sun-stroke*), 366
Inspection, 312
Intercostal (*between the ribs; the intercostals are two sets of muscles—the external and the internal—which pass in contrary directions*, 551
Intercostal neuralgia, 408
Intermarriage, 392
Intermittent (*periodical; a term applied to diseases which are interrupted by intervals of health*), 209
Intermittent fever, 209; definition, 210; temperature, 210; types, 210; laws, 211; symptoms, 211; pathogenetic effects, 212; Dumb Ague, 213; causes, 213; treatment, 213; accessories, 215; preventives, 216
Intermittent pulse, 505
Intertrigo (*inter*, between, *and terere*, to rub; *chafing of infants*), 711
Intervertebral substance (*the layers of soft elastic fibro-cartilage, which intervene, like so many buffers, between the vertebræ, to diminish the force of jars, etc.*), 766
Intestinal worms, 618
Intoxication and Apoplexy, 360, 971; and poisoning with Opium, 973
Invalids, food, etc., for, 105
Inversion of the eyelids, 471
Intus-susception (*inclusion of one portion of a tube within another*)
Iodide of Mercury, 913
„ Potash, 903
„ Sulphur, 485
Iodium (*Iodine*), 896
Ipecacuanha, 898
Iris Versicolor, 900
Iritis (*Inflammation of the iris*), 447; causes, 447; varieties, 448; symptoms, 449; treatment, 450; accessories, 450
Iron, *see* Ferrum, 883
Irregular action of the heart, 502
Irritability of the Bladder, 686
Irritation from stinging Insects and Plants, 758
Irritation of the skin, 754
Itch, 756; barber's, 734
Itching of the skin, 715; of the canthi, 853
„ of anus, 657
-itis (*a termination of many words, denoting inflammation, as, Gastritis—inflammation of the stomach*)

Jactitation (*jactare*, to toss about; *extreme restlessness*), 182, 422
Jalap, 640
Jaundice, 665, 888; symptoms, 665; causes, 666: treatment, 666; accessories, 667
Jellies, 110
Juglans cinerea, 733

Kali Bichromicum, 901
„ Bromidum, 733, 902
„ Chloratum, 231, 561
„ Iodidum, or Kali Hydriodicum, 903
„ Permanganicum, 135, 172, 230, 231
Kalmia Latifolia, 413
Kidney, inflammation of, 677
„ gouty, 672
„ Granular, 672
King's Evil, 296
Kink-cough (*Whooping-cough*), 234
Kitchens, subterraneous, 346
Knee, Dislocation of, 817

Koumiss, 319
Kousso, 625
Kreasote, 970; inhalations, 535
,, Plaisters
Kreasotum (*κρεας*, flesh, *and σωτηρ*, a preserver; *an antiseptic, acrid, oily fluid obtained from tar by distillation*), 904
Krukenburg's prescription, 604
Kyphosis (*κυφος*, gibbous; *a deviation of the bones, causing a hunch or deformity*), 762

Labouring classes, toils of the, 837
Lachesis, 905
Lachrymation (*flow of tears*), 528
Lachrymal (*λακρυμα*, tear; *relating to tears*), 305
Lamellar (*lamella*, a plate; *composed thin laminæ or leaves*), 439
Lameness, rheumatic, 260
Lancet, The, on purgatives, 641
Land Scurvy (*Purpura*), 343
Laryngeal Diphtheria, 232
Laryngismus Stridulus (*Croup*), 388
Laryngotomy (*λαρυγξ*, larynx, *and τομη*, incision; *opening the larynx by a surgical operation*), 803
Lateral Curvature of the Spine, 765; symptoms, 765; causes, 765; treatment, 766; accessories, 767
Laudanum, 970
Lavender, Oil of, 757
Lead, a cause of Gout, 264
Lead Colic, 638, 963; Palsy, 638
,, Sugar of, 963
Ledum Palustre (*marsh tea*), 717, 759
Leg, ulcers on, 739; weeping, 725
Lemonade, 116; nitric, 116
Lemon-juice, in tea, 50; in Scurvy, 344
,, Salts of, 969
Lenticula(*lens-shaped; doubly convex*), 461
Lentigo, 736
Lepra Vulgaris (*Psoriasis, a scaly eruption*), 719
Leprosy, 289; varieties, 290; symptoms, 291; treatment, 292; accessories, 292
Leptandra Virginica, 906
Lesion (*a morbid functional or structural alteration*), 296
Leucoma (*λευκος*, white; *a white opacity of the cornea, resulting from acute Ophthalmia; Albugo, from albus*, white, *is synonymous*), 440, 1020
Leucorrhœa, 881; and Scrofula, 298
Lice (*Pediculi*), 754
Lichen (*λιχην*; *a papular eruption*), 717
Liebig's Extract of Meat, 107
Lienteria (*λειος*, smooth, *and εντερον* intestine; *frequent liquid evacuations of half-digested food*)
Lienterica, Diarrhœa, 630
Ligamentum teres (*a small fibrous fascia, extending from the coronoid process of the ulna to below the occipital tubercle of the radius; also the round ligament attached to the head of the os innominatum*), 769
Ligatures, 807
Light, 63
Lightning, stroke of, 792
Limestone and Goître, 515
Lime-water, 568; and milk, 635
Liniments, 258, 262
Linseed-meal poultices, 130
Linseed-tea, 115
Liquid beef, 106
Liquor Potassæ Arsenitis, 518
List of medicines, 99
Lithotomy (*λιθος*, stone, and *τομη*, an incision; *cutting for Stone*), 683
Lithotrity (*λιθος*, stone, and *τριβω*, I rub down; *crushing a stone*), 682
Liver, Abscess of, 660: congestion of, 661; simple enlargement of, 661; deranged after ague, 212; inactivity of, a cause of calculi, 685; Inflammation of, 659
Liver spots, 754
Lobelia Inflata, (*Indian Tobacco*), 541
Lockjaw, 380
Locomotor Ataxy, 374
Lordosis (*λορδος*, curved; *forward curvature of the spine, or general curvature*), 762
Loss of blood, 587; of smell, 493; of voice, 530
Low fever, (*Typhus*), 174
Lumbago, 256
Lumbar region (*lumbi*, the loins; *the posterior of the abdomen between the base of the chest and the pelvis*), 261
Luncheon, 32
Lungs, bleeding from, 309, 588; inflammation of, 546
Lupus, 288
Lycopodium Clavatum, 907
Lymph (*a colourless fluid contained in the lymphatic vessels*), 741, 770
Lymphatic glands, disease of, 306

Macaroni pudding, 109
Maceration (*the process of almost dissolving a solid ingredient by steeping it in a fluid*), 833
Macrotine, 459
Macula (*a spot; discoloration of the skin with a change of texture*), 343
Maggot-pimple, 732

Magma (*μαγμα, the residuum of a substance whose fluid parts have been expressed*)
Magnesia Carbonica, 570, 572, 573
,, Muriatica, 489
Malaise, 722
Malar (*malum*, an apple; *relating to the cheek bone, so called from its roundness*), 573
Malaria (*bad air; effluvia from marshy ground*), 198, 410
Malignant Cholera, 220
,, disease, *see* Cancer, 272
Malignant and Non-malignant Tumours, 273
Mammæ (*the breasts*), 240
Mammary Abscess, 771
Manganum (*manganese*), 711, 723
Mania, 428; pathology, 428; causes, 429; symptoms, 429; treatment, 430; accessories, 431
Marasmus (*μαρασμος*, atrophy, *progressive wasting*), 325
Marsh-miasm, 209
Mastication, 596
Masturbation (Self-Abuse), 393, 702
Materia Medica (*medical materials: the branch of medical science which relates to medicines*) 819
Materies morbi (*matter which serves as the vehicle of disease*), 222
Matico, 696
Measles, 157; and Scarlet Fever, 160; sequelæ, 161; and Consumption, 163
,, False (*Roseola*) 712
Meat, modes of cooking, 46; diseased, 631; preserved, 43; Liebig's Extract of, 107; raw juice of, 320
Meatus (*a passage or canal*), 120, 474
Medical and Surgical Diseases, 143
Medicines, the, 97; alternation of, 103: directions for taking, 101; for the aged, 787
,, genuine, 100
,, list of, for medicine chest, 97
,, ophthalmic, 445
,, proper dose, 101
,, forms, 97
,, names, 97
,, attenuations, 97
Medicine-chest, 97
Medulla oblongata (*the enlarged upper portion of the spinal cord*), 380, 390, 784
Meibomian glands (*follicles in the tarsal cartilages, and at the inner surfaces of the eyelids, which secrete a sebaceous humour, and are named after Meibomius, who has described them*), 163, 434
Melancholia, simple, 425; symptoms, 426, 431
Membrana Tympani, 477
Meningitis, 356; tubercular, 303; chronic, 428, 451; cerebro-spinal, 722
Menopausia, (*cessation of Menstruation*), 1021
Menorrhagia (*excessive menstrual discharge*), 869, 933
Menstruation (*the monthly function peculiar to women*), 347
Mensuration (*mensura*, measure; *measurement of chest*), 312
Mentagra (*Barber's Itch*), 734
Mental emotions and Diarrhœa, 632
,, and physical training, 706
,, faculties in old age, 781
Murcurius (*Mercury*), 908
,, Biniodatus, 908, 913
,, Corrosivus, 908, 913
,, Cyanuretum, 584
,, Solubilis, 908, 913
,, Sulphuratus Ruber, 908, 913
,, Vivus, 908, 913
Mercury, 960; Iodide of, 908
,, and False Teeth plates, 478
Mesenteric (*μεσος*, middle, and *εντερον*, intestine; *belonging to the mesentery, a duplicature of the peritoneum, which suspends and retains in situation the small intestine*), 301
Mesenteric disease, 325
Mesial (*μεσος*, middle; pertaining to the middle), 466
Metacarpal (*beyond the wrist: the five long bones forming the back of the hand*), 861
Metastasis (*the transference of local symptoms of disease from one part of the body to another*), 240, 245
Metatarso-phalangeal (*relating to the first phalanges of the toes, which are united to the metatarsus*), 265
Metrorrhagia (*excessive hæmorrhage from the uterus*), 924
Mezerum, 913
Miasma (*infection floating in the air; as, the emanations from swampy grounds, marsh-miasm, etc.*), 213
Microsporon mentagrophytes, 735
Micturition (*urination*), 61, 94, 676, 686, 690
Migraine (*contraction of hemicrania; see that word*), 408, 412
Miliary (*milium*, millet; *resembling millet seed*), 201
Milk, 41; condensed, 42
,, crust, 723
,, diet, 157, 163
,, in fevers, 183

Milk leg (*Phlegmasia alba dolens*), 511
,, and limewater, 636
,, Sugar of, 111, 564
Millefolium, 915
Military Ophthalmia, 436
,, Sore throat, 580
Miner's Elbow, 747
Miscellaneous Diseases, 762
Mitral regurgitation (*reflux of blood through the left auriculo-ventricular opening during contraction of the left ventricle*), 353
Mitral valves (*two triangular valves which permit the flow of blood from the left auricle of the heart into the ventricle and oppose its return*), 497
Moderation in convalescence, 142, 197
Modes of dying, 783
Mole, 750
Molecular, (*molecula*, dim. of *moles*, a mass; *belonging to minute portions; hence "molecular" death, in contradistinction to "somatic" death*), 118, 679
Monkshood, 982
Morphia (*morphine; an alkaloid of opium, the narcotic principle of that drug*), 315, 318, 415
Mortification (*Gangrene*), 246, 548
Morbus Coxæ (*scrofulous caries at the head of the os femoris, with dislocation, shortening of the limb, often inducing hectic and death*), 769
Moschus (*musk*), 402, 403, 502, 504
Motes (*muscæ volitantes*), 452, 459
Mother's-Mark, 750
Motor nerves (*causing movement, as opposed to sensory nerves*), 638
Mouth, Canker of, 565; inflammation of, 561; sore, 562
Muco-enteritis, 608
Mumps, 239; causes, 239; symptoms, 240; metastasis, 240; treatment, 240; accessories, 240
Muriate of Lime, 744
Muriatic Acid (*Hydrochloric Acid*), 819 967; in beef-tea, 106
Muscæ Volitantes, 459, 460
Muscles, Exhaustion of, 817; formation of, 68; of the aged, 779
Muscular Atrophy, 376; fatigue, 817; Rheumatism, 256; Rheumatism and muscular weakness, 259
Mushrooms, 39, 984
Musquito-stings, 758
Mutton-broth, 108
Mutton-chops, how to cook, 108
Myalgia (*muscular pain*)
Mydriatic (*μυδος*, moisture; *causing dilatation of the pupil*), 450
Myelitic (*μυελος*, narrow; *relating to the spinal marrow*), 373
Myopia (*μυω*, I close, and *ωψ*, the eye; *shortness of sight, which leads the myopic to half close the eyes*), 468; causes, 468; treatment, 469; accessories, 470
Myringitis (*myringa*, the membrana tympani; *inflammation of that membrane*), 477
Myriotica Sebifera, 294.

Nævus (*Mother's-Mark*), 750
Nares (*nostrils*)
Nasal catarrh, 489
Nates (*buttocks*), wasting of, 769; circulation in, 1013
Natrum Sulphuratum, 347, 508
Natural decay, 777
Nausea, *see* Dyspepsia, Vomiting, etc.
Nausea marina (*Sea-sickness*), 606
Near-sightedness (*Myopia*), 468
Neave's Farinaceous Food, 111, 564, 569, 609, 635
Necrosis (*νεκρω*, I kill; *mortification, of bone especially*), 287
Nematoid parasites (*νεμα*, a thread, and *ειδος*, resemblance; *a class of worms containing many varieties, round or thread, as opposed to the flat worms*), 625
Nephritis (*νεφρος*, kidney, and *ιτης*, inflammation; *inflammation of the kidneys*), 352; acute, 671; desquamative, 671; symptoms, 671; causes, 672; chronic, 672; treatment, 673; accessories, 674
Nerve, division of, 415
Nervous sick-headache, 415; symptoms, 415
,, symptoms in Typhus, 179
,, system, diseases of, 356
Nettle-rash, 712
,, stings, 713, 759
Neuralgia, 408; varieties, 408; symptoms, 409; grey hair and, 409; causes, 410; treatment, 414; accessories, 414; division of the nerve, 415; electricity, 414; centric, 637; peripheral, 637
Neurolytic (*relating to the nerve covering*), 373
Neurotic (*related to, or seated in, the nerves*), 392
Neurilemma (*νευρον*, nerve, and *λεμμα*, a coat; *the transparent membrane surrounding the nerves*), 267
Nightmare, 593
Night-sweats, 308
Nitrite of Potash, 965
Nitre, 965
Nitric lemonade, 116
Nitricum Acidum, 820, 967
Nitrite of Amyl, 237, 501

Nitrite of Strychnia, 315, 318
Nitrogenous (*νιτρον* and *γενναω*, I generate; *containing nitrogen or azote*), 109
Nitro-Glycerine (*Glonoine*), 888
Nodes (*a thickening of the periosteum or bone from a venereal cause*, 282
Nodosities (*calcareous concretions in joints, from Gout or articular Rheumatism*), 873
Noises in the ears, 485
Normal (*that in which there is no deviation from the general rule*), 587
Nose, diseases of, 488
,, foul discharge from (*Ozæna*), 488
,, bleeding from, 490
,, Polypus of, 492
Nostrils, plugging the, 491
Nursing, directions on, 136
Nux Juglans, 315, 318, 717, 727, 733
,, Moschata (*nutmeg*), 402
,, Vomica, 915, 983

Oat-cake, 37; oatmeal porridge, 108, 645
Obesity (*excessive fatness*), 774; causes, 775; treatment, 776
Observations pertaining to health, 27
Obstruction of the intestine, 668
Obturator nerve (*obturo*, I stop up; *a nerve of the pelvis, proceeding from the second and third lumbar nerves*), 769
Occipital (*pertaining to the back part of the head*)
Occiput (*oc*, and *caput*, head; *the back part of the head*), 395
Occupation, change of, 418
Occupations and health, 77, 297, 706
Odontalgia (*Toothache*), 569
Œdema (*οιδημα*, a swelling; *local dropsical swelling*), 350, 673, 887
Œsophagus (*the tube leading from the pharynx to the stomach—the gullet*)
Offensive breath, 564
Oil, Cajeput, 737
Oil, Camphorated, 157
Oil of Lavender, 757
Oil of Tar, 970
Oil of Vitriol, 967
Officinal (*officina*, a shop; *medicines directed by the colleges to be kept in the shops*), 891, 926
Old Age and Senile Decay, 777; youth and age, 777; physical changes, 778; mental, 781; gradual decay, 781; winter and senility, 782; premature, 782; modes of dying, 783; treatment of the aged, 784
Old Age, constipation in, 642
Olecranon (*ωλενη*, elbow, and *κρανον*, head; *the protecting upper extremity of the ulna, on which we lean*) 748
Oleum Crotonis (*Croton-oil*), 877
Olive-oil, frictions, 239
Onanism (*Self-abuse*), 393, 394, 702
Onion in stings, 759
Onychia (*Whitlow on the side of the finger nail*), 746
Opacity in the crystalline lens, 461
Opalescent (*milky, resembling the opal*), 270
Ophthalmia (*οφθαλμος*, the eye; *diseases of the eye*), 433; simple, 433
,, catarrhal, 434
,, gonorrhœal, 444
,, purulent, 436; causes, 436; treatment, accessory, 438; preventive, 439
,, purulent, of infants, 439; symptoms, 439; causes, 440; remedies, 441; treatment, 441; accessories, 442; diet, 443; preventives, 443
,, scrofulous, 304, 306, 436
Ophthalmic medicines, leading indications for, 445
Ophthalmoscope (*οφθαλμος*, eye, *and σκοπεω*, I regard attentively; *an instrument which, by throwing light on the retina, reveals the internal condition of the eye*), 451, 782
Opisthotonus (*οπισθε*, backwards, *and τεινω*, I stretch; *bending backwards by tetanic spasms of the muscles*), 381
Opium, 918, 971
Orbicularis palpebrarum muscle (*a broad, thin, oval muscle, which surrounds the orbit, and is used in closing the eyelids*), 304
Orchiocele (*ορχεα*, scrotum, and *κηλη*, rupture; *scrotal hernia*)
Orchitis (*ορχις*, testicle; *inflammation of the testicle*), 287, 693, 695
Ossification (*os, ossis*, a bone, *and facere*, to make), 780
Otorrhœa, 480; Carbolic Acid in, 481
Ovarian Neuralgia, 409
Over-dose of medicine, 954
Over-exertion, 817
Overloading the stomach, 598
Oxalic Acid, 549, 555, 556, 968
Oxyuris vermicularis, 619
Ozæna (*οζη*, an offensive odour; *a fœtid ulcer in the nose*), 488
Ozone (*οζω*, I smell of something; *a modification of oxygen*), 177
Ozonic Æther, 685

Pack, wet, 126, in Rheumatism, 255; in Typhus fever, 183

Pain, its indications, 92
Painless Death, 787
Painter's Colic, 638; Paralysis, 377, 962
Palpation (*palpare*, to feel; *pressure of the fingers upon an organ to detect disease*), 313
Palpitation, 502; disease of the heart and, 503; causes, 504; treatment, 504; accessories, 505
Palsy, *see* Paralysis
Pancreatic (*relating to the pancreas, or abdominal salivary gland, whose juice emulsifies fatty matters*), 326
Papillæ (papilla, *pl. æ*, nipples; *small eminences on the surface of any part*), 211
Papillæ circumvallatæ (*spherical mucous follicles, arranged in two oblique lines at the base of the tongue*), 336
Papula (*a pimple*)
Paralysis, 371; causes, 372; muscular conditions, 372; forms, 372; infantile, 374; local, 375; wasting, 377; treatment, 377; accessories, 379, 638, 679
Paralysis, general, of the Insane, 429
Paraplegia (παρα, beyond, *and* πλησσω, I strike; *paralysis of the lower half of the body*), 452, 876
Paraphimosis, 694
Parasitic disease of the intestines, 618
,, diseases of the skin, 753
Parenchyma (παρενχυμι, effusion; *a glandular or other texture, supposed at one time to consist of effused fluid, formed of agglomerated globules and areolar tissue, and tearing more or less easily*), 383
Paresis, vaso-motor (παριημι, I relax, *Paralysis; vas*, a vessel, *and motor*, mover; *vascular stagnation*), 420
Parietal (*applied to the flat bone on each side of the skull*), 872
Par vagum (*the eighth pair of nerves, or pneumogastric—the wandering pair*), 541, 949
Passions, the, and industry, 705
Patella (syn. olecranon mobile, *patera*, a bowl; *the flat, short, thick, rounded bone in front of the knee*), 748
Pathognomonic (παθος, suffering, and γινωσκω, I know; *characteristic of a disease*), 270
Pathology (*the doctrine or investigation of the nature of diseases*), 224
Pearl Barley, 109
Pediculi (*lice*), 754
Pediculus capitis (*head-louse*), 754
Pepsine (πεψις, coction, digestion; *an element of the gastric juice employed in digestion; artificially obtained from rennet bags*), 591, 594
Percussion (*percutio*, I strike; *eliciting sounds by striking*), 312, 547
Perforation of bowels, symptoms of, 192
,, Membrana Tympani, 478
Pericarditis (περι, about, *and* καρδια, heart; *inflammation of the serous sac which encloses the heart*), 253, 497, 672, 783
Perichondrium (περι and χονδρος, a cartilage; *a fibrous covering of non-articular cartilages*), 250
Perinæum (πηριν, a sac or pouch; *the triangular space between the ischiatic tuberosities, the anus, and genitals*), 692
Periosteum (περι, *and* οστεον, bone; *the membrane which invests the bones*), 250
Periostitis (*inflammation of the periosteum*), 452
Peristaltic (*the vermicular contractions of the intestines within themselves*), 331
Peritonitis (περιτονιον, peritonæum, *and* ιτες, inflammation; *inflammation of the abdominal membrane which invests its viscera*), 586, 668, 672, 783
Permanganate of Potash, 135, 172, 230
Pertussis (*Whooping-cough*), 234
Peruvian bark (*China*), 864
Perverted sense of smell, 493
Petroselinum, 696
Petechiæ (*flea-bite-like spots*), 343
Petit mal, le, 392
Petroleum (*rock-oil*), 607, 695, 696, 737, 919
Peyer's Patches (*numerous, conglobate glands, of a honeycomb appearance, found in the lower portion of the ileum, and well described by Peyer*), 186
Phagedenic (φαγο, I eat; *rapidly corroding neighbouring parts*), 282
Phalanges (*the bones of the fingers and toes*), 861
Pharynx (*the canal or bag between the mouth and the œsophagus*), 758
Pharyngitis (*inflammation of the pharynx*), 579, 581
Phenic Acid, *see* Carbolic acid
Phimosis (*a condition in which the prepuce cannot be drawn back from the glans penis*), 688, 694

Phlebitis (*inflammation of the veins*), 510
Phlegmasia alba dolens (*White leg*), 511
Phlegmon (*an acute Abscess of the subcutaneous cellular tissue*), 244
Phosphate of lime (*Calc.-Phos.*), 854
Phosphate of Iron, 349, 884
Phosphoricum Acidum, 822
Phosphorus, 921, 966
Photophobia (*φῶς*, light, *and φοβος*, fear; *intolerance of light*), 359; *see also* Ophthalmia, etc.
Phthiriasis (*a condition favouring lice*), 754
Phthisis pulmonalis, 306; diagnosis of tubercular and non-tubercular, 307; symptoms, 307; physical signs, their detection, 312; temperature, 313; causes, 313; duration, 314; treatment, 314; accessories, 306; preventives, 325
Physical and mental training, 706
Physiology (*the science which treats of the healthy functional action of living beings*), 730
Phytolacca Decandra, 923
Pigeon-breast, cure of, 335
Piles, 651, 889
Pilules, 98
Pimples, 731
Pine Wool, 262
Pine-oil, 262
Pitting, to prevent, 149
Pityriasis (*πιτυρον*, bran; *a non-contagious, superficial skin affection, exfoliating scales, with no formation of crusts, or excoriations*), 121, 719; versicolor, 754
Plague, 184
Plants, stings of, 758
Platina (*Platinum*), 925
Pleurisy (*inflammation of the pleura*), 551, 812; symptoms, 551; physical signs, 552; causes, 552; treatment, 552; accessories, 553, 672; false, 551
Pleurodynia (*pain in the muscles between the ribs*), 408, 551
Pleuro-pneumonia (*Pleurisy with Pneumonia*), 546
Plugging the nostrils, 491
Plumbum (*Lead*), 926
Pneumonia (*inflammation of the lungs*), 546, 812; symptoms, 546; physical signs, 547; prognosis, 548; causes, 548; treatment, 549; accessories, 550, 674, 722
Pneumogastric nerves (*πνευμων*, the lung, *and γαστηρ*, stomach; *the eighth pair of nerves, distributed to the lungs and stomach;—"the Par vagum"*), 235, 541
Pneumorrhagia (*πνευμων*, and *ῥαγη*, a breaking forth; *bronchial hæmorrhage*), 309
Pneumo-pleuritis, 546
Podagra (*Gout*), 262
Podophyllum Peltatum, 926
Poisonous Fungi, 984
Poisons, 818; *see also* Part V., 955
Poisoned Wounds, 760
Polygonum, 740
Polypus of the nose, 492
Polyuria (*πολυς*, much, and *ουρον*, urine), 338
Pomade, Cantharidine, 858
Popliteal, *poples*, the ham; *relating to the ham, a name given to various parts*), 508
Porridge, oatmeal, 108, 645
Porrigo capitis, 725; decalvans, 753; favosa, 754; larvalis, 731
Portal (*porta*, gate; *pertaining to the vena porta of the liver*), 351, 655
Port-wine-Stain, 750
Potash, *see* Kali
Potash soap, 729
Potatoes, use, preparation, choice of, 37
Pott's Curvature, 762
Poultices, 130, 745
Precautionary measures in fevers, 198
Pregnancy, vomiting during, 604; *see also under* Nux V., Kreas., Iris, etc.
Premature old age, 782
Prickly heat, 717
Preface, vii
Presbyopia (*far-sightedness—the opposite to Myopia*), 876
Professions and health, 77
Prognosis (*the art of judging beforehand the course of disease*), 245
Polapsus ani (*falling of the bowel*), 658
Prolonged nursing, 458
Prophylactics (*προ, and φυλασσω*, I defend; *preserving or defending from disease*), 524
Prostatitis (*inflammation of the prostate*), 694
Prostate gland, enlargement of, 688
Prostration, 193
Proud flesh, 742
Prurigo, 715
Pruritus ani, 657
Prussic Acid, 237, 381, 394, 500, 518, 541, 980
Psoas (*ψοας*, the loins; *lumbar*), 854
Pseudo (*a prefix signifying false or spurious*), 231
Psoriasis (*a scaly cutaneous disease*), 719
Psychical (*ψυχη*, the mind or soul; *relating to the mental or moral faculties*), 393

Pterygium (*a varicose excrescence of the conjunctiva*), 1030
Ptosis (*πτωσις, a drooping or falling*), 373
Ptyalism (*salivation*), 923
Puddings, batter, 114; bread, 110; macaroni, 109; rice, 109, 114
Puerperal Convulsions, 888
,, Fever, 248
,, Ephemera, 249
,, Peritonitis, 668
Pullna water, 684
Pulmonary Consumption, *see* Phthisis, 307
Pulsatilla Nigricans, 928
Pulse, in health and disease, 89
,, Intermittent, 505
Puncta lachrymalia (*two small, round, contractile openings, continuous with the lachrymal ducts*), 472
Pure air, composition of, 58; in Scrofula, 297
Purgatives, 639; the *Lancet* on, 641
Purging (*Diarrhœa*), 630
Purpura (*hæmorrhage in the skin*—Land Scurvy), 343
Purulent Ophthalmia, 346; of infants, 439
Pus (*akin to πυος*, matter; *a secretion from inflamed textures of an aqueous fluid with suspended corpuscles. Normal pus is yellowish-white, opaque, and inodorous*), 151
Pyæmia (*admixture of pus or sanious fluid in the blood; purulent infection*), 511
Pyelitis, 1030
Pyrexia (*a state of fever*), 532
Pyrosis (*πυροω*, I burn; *a burning sensation in the stomach, with acrid, watery eructations*), 586, 604

Quiet in fevers, 184, 303, 359
Quinine, 864; poisoning, 113
Quinsy (*inflammation of the tonsils*), 582, malignant, 227; symptoms, 582; sequelæ, 583; treatment, 583; accessories, 584; prevention, 585

Rabies (*rabo*, I am mad; *Canine madness*), 381
Rachitis (*Rickets*), 327; want of light and, 63: changes in bones, 327; changes in ligaments, 329; changes in organs, 330; symptoms, 330; complications, 331; causes, 332; treatment, 332; accessories, 333: mechanical support, 334; cure of pigeon-breast, 334
Radius (a spoke; *the smaller bone of the forearm*), 329
Radix (*a root*), 279
Rain-water in Skin diseases, 55
Raised sleeping-place in tropics, 81
Ranunculus Bulbosus, 930
Rash, *see* Skin, Urticaria, etc.
Reader, hints to the, xi
Recti muscles (*rectus*, straight; *four muscles concerned in the voluntary movements of the eye*), 448
Rectum (*the lower bowel*), Fissure of, 647
Red-gum (*Strophulus*), 718
Refrigerants (*refrigerere*, to cool; *medicines which reduce the heat of the body*), 822
Regular hour, 646
Relapsing fever, definition, 199; cause, 200; symptoms, 200; sequelæ, 201; treatment, 201
Relaxed bowels (*Diarrhœa*), 630
,, scrotum, 888
,, Throat, 579; pathology, 579: symptoms, 580; causes, 580; treatment, 580; accessories and preventives, 581
Remittent fever, 207; definition, 208; symptoms, 208; treatment, 209
Renal dropsy, 352; *see also* Bright's disease, 672
Repetition of doses, 101
Residence, healthy, 65, 323
Resolution (*the subsidence of inflammation without abscess, etc.*), 660
Respirator, in tropics, 80, 216; the natural, 536, 582
Respiratory system, diseases of, 517
Rest, 196, 240, 414, 459, 473, 512, 581, 588, 664, 776
Retching, *see* Vomiting
Retention of urine, 690
Retinal (*pertaining to the retina, or essential organ of vision*), 360
Rheumatic fever (*Acute Rheumatism*), 250; pathology, 250; causes, 251; symptoms, 252: metastasis, 253; heart complications, 253; treatment, 254; diet, 255; accessories, 255
Rheumatoid (*ῥευμα*, catarrh, *and ειδος*, resemblance), 201
Rheumatism, chronic, 259; treatment, 257; accessories, 262
Rheumatism, muscular, 256: Stiff-neck, 256; Pleurodynia, 257; Lumbago, 257; Sciatica, 258; accessories, 258; and weakness, 259
Rhododendron Chrysanthum (*Siberian rose*), 254, 261, 267, 352, 413
Rhus Toxicodendron, 930
Rhythm, or Rythm (*ῥυθμος*, measured movement; *relative duration of the movements of an organ in health and disease*), 89, 497
Rice, 109; pudding, 114; water, 115

Rickets, *see* Rachitis, 327
Rigidity of the os uteri, 888
Rigor (*coldness with shivering*), 87, 200, 201, 228
Rima glottidis (*rima*, fissure, and *glottis*, mouth-piece; *aperture in which the voice is produced, synonymous with Glottis*), 804
Ringworm, 753; vesicular, 721
Risus Sardonicus (*a tetanic convulsive grin*), 380
Roasting, 47
Robinia Pseudo, 932
Room, sick, 137, 151, 183, 535
Roseola (*False Measles*), 712
Rose-rash, 712
Round-worm, 618
Rowing, 68, 322
Rubini's treatment of Cholera, 226
Rupture (*Hernia*), 614
Ruta Graveolens, 933
Rugose (*ruga*, wrinkle, *wrinkled*), 291

Sabina, 933
Salicylic acid plaisters, 721
Salt, Spirit of, 967
Salt-water Baths, 75
Salts, nutritive, in food, 35
„ of Lemon, 969
„ of Sorrel, 969
Sago, 110
Sambucus Nigra (*Black Elder*), 501, 541
Sanguinaria Canadensis, 493, 934
Sanious (*consisting of corrupted humours*), 489
Sanitary measures, 64, 180, 186, 225
Sanitary hints for Europeans in tropics, 79
Santonine, 625
Saphena, internal (*σαφης*, manifest; *one of the two sub-cutaneous veins extending from the foot to the groin*), 513
Sarcocele (*σαρκος*, flesh, *and* *κηλη*, a tumour; *Scirrhus or Cancer of the testicle*), 286
Sarcina (*a microscopic plant sometimes found in vomited matters*), 1031
Sarracenia Purpurea, 149, 151
Sarza, 935
Sausages and pork, 599, 628, 635
Scabies (*Itch*), 756
Scalds and burns, 795
Scalled-head (*Eczema*), 723
Scapulæ (*shoulder blades*), 327
Scarlatina, *see* Scarlet-fever
Scarlet-fever, 164, 845; diagnosis from Measles and other diseases, 177, 160; cause and modes of propagation, 167; caution, 168; treatment, 168; accessories, 171; prevention, 171; sequelæ, 172, 672
Scars after vaccination, 153
Schneiderian membrane (*the mucous lining of the nasal fossæ and other cavities communicating with the nose*), 489
Schools, ventilation of, 62
Sciatica, 258, 408
Scirrhus (*hard cancer*), 273, 274
Sclerotic (*δκληρος*, hard; *the strong, opaque, fibrous membrane which forms the white of the eyeball*), 465
Scorbutus (*Scurvy*), 344
Scratching, 715
Scrivener's Palsy, 375
Scrofula (*Struma*), sunlight and, 63; definition, 294; causes, 296; treatment, 302; accessories, 302; prevention, 303
Scrofulous disease of the Glands, 306; of the Hip-joint, 769; Ophthalmia, 304
Scurvy, 344; Land-Scurvy, 343
Scutellaria Lateriflora (*skull-cap*), 384
Scybala (*σκυβαλον*, dung; *hard knotty fæces*), 610
Sea-bathing, 77; salt-water-baths, 75
Sea-sickness, 606
Seat, itching of, 657
Sebaceous Tumour (*Wen*), 752
Sebiparous glands (*sebum*, suet, *and pario*, I bring forth; *small organs embedded in the skin, which open on the surface and secrete a suety matter*, 732
Secale Cornutum (*Ergot of Rye*), 936
Secondary diseases, *see* Sequelæ
Sedative (*sedare*, to settle or assuage; *tending to diminish vital action*, 122
Self-abuse, 392, 393, 702
Seltzer-water, 697
Seminal emissions (*Spermatorrhœa*), 702
Senecio, 937
Senega (*snake-root*), 353, 533
Senile decay, 777
Sensibility to cold, how to diminish, 529
Sensitiveness to light, 359; *see* Photophobia; to sound, 487; *see also under* Bell., Cham., China, Ign., etc.
Sepia, 938
Septum (*sepio*, I fence in; *the partition between the nares*), 489
Sequelæ (*morbid affections following acute diseases; secondary diseases*) of Diphtheria, 228; Enteric-fever, 195; Intermittent-fever, 209; Measles, 157; Relapsing-fever, 199; Scarlet-fever, 164; Small-pox, 145

Serpent-bites, 760
Serous (*containing serum, the most watery parts of animal fluids*), 221
Seton thread, 748, 751
Sexual excesses, 394, 396, 408, 702
Shampooing, 379, 414
Shell-fish, 45
Shingles (*patches of vesicles*), 721
Shortness of breath, 91, 310; *see also* Breath
Shower-bath, 74, 405, 519, 529, 545, 689
Shoulder, Dislocation of, 814
Sick-headache, Nervous, 415
Sickness, *see* Vomiting
Sick-room, 137, 151, 183, 535
,, dietaries, 112
Sight, impairment of, 458; in the aged, 781; preservation of, 455
Signs and symptoms of disease, 82
Silicea, 939
Simple melancholia, 425
Simple Continued fever, 216
Simple Cholera, 219
Sinapism (*Sinapis nigra, and S. Alba*, black and white mustard; *a mustard poultice*), 365
Singultus (*hiccough*), 593
Sinking at the Stomach, 1033
Sinus (a bay or curve; *any cavity with a narrow opening; a long, narrow, hollow track, leading from an abscess, etc.*), 773
Sitz-bath, 125, 651; in Amenorrhœa, 991
Skin, its indications, 93; diseases of, 710; Catarrhal inflammation of, 723; Inflammatory redness of, 710; cracks in, 736; Irritation of, 758: from insects, etc., 758; Itching of, 715; Parasitic Diseases of, 753
Skipping-rope, 738
Skoliosis (σκολιος, crooked, and ωσις, morbid condition; *spinal distortion from Atrophy or contraction of the muscles*), 765
Sleep, heavy, 886; uneasy, 886
Sleeping-rooms, 59, 297
Sleeplessness, 418; physiology, 418; causes, 419; treatment, 421; accessories, 422
Slough (*soft, mortified substance, often seen on the surface of suppurating and ulcerating parts*), 739
Small-pox, 145, 731
Smell, Loss or Perversion of, 493
Soap, carbolic, 730
,, transparent, 730
,, in burns, 797
Social indiscretions, 532
Soda-water and milk, 326, 607, 609, 613, 636
Soft corns, 747
Sordes (*a Latin term for dirt or filth; hence applied to the foul deposit on the teeth during disease*), 196
Sore eyes, 471
,, mouth, 562
,, throat, 579
Sorrel, Salt of, 969
Soreness of infants, 711
Soups, Broths, etc., 49
Spanish fly, 858, 985
Spasm of the bladder, 686; of the bowels, *see* Colic; of the larynx, 388, 389; of the stomach, 602
Spasmodic Croup, 388
Spasmodic Stricture of the urethra, 698
Specific (*a remedy which has a special power to cure*), 150
Specks before the eyes (*Muscæ volitantes*), 459; on the cornea, 463
Spectacles, 457
Spermatorrhœa (σπερμα, seed, and ῥεω, I flow; *involuntary seminal emissions*), 694, 696, 702; extent and evils of the habitual cause, 702; causes, 703; effects, 704; preventives, 705; treatment, 709
Spicula (*spiculum, small spike-like fragments of bone*), 393
Sphincter (*a muscle to close the aperture around which it is placed*), 626
Spigelia Anthelmia, 940
Spinal hot-water and ice-bags, 129
Spine, Lateral curvature of, 765
Spine, Angular Deformity of, 762
Spirit of Salt, 967
Spirit-drinking, *see* Stimulants
Spirits of Wine, 97
Spirometer (σπειρω, I breathe, and μετρον, measure; *an instrument for ascertaining the breathing capacity of the lungs*), 310
Spitting of blood, 587
Spleen, enlarged, 188, 212
Splinters, etc., to extract, 801
Spongia Tosta, 941
Sponging recommended, 74, 152, 163, 171, 173, 184, 304, 334, 397, 414, 529, 560, 575, 601, 708, 721
Spongio-piline, 131, 173, 550
Sporadic (*scattered here and there*), Cholera, 219
Sprain, 799
Spray-producer, 136, 233, 519, 564
Squinting (*Strabismus*), 466
Stammering and stuttering, 399
Stapes (*sto*, I stand, *and pes*, a foot; *a small bone resembling a stirrup* in the cavity of the tympanum), 801

Stasis (*σταω*, I stop; *stagnation without disease*), 535
St. Anthony's Fire (*Erysipelas*), 244
Staphyloma posticum (*posterior elongation of the eyeball*), 470
Staphysagria (*Staves-acre*), 941
Starch, contained in food, 34; in Erysipelas, 247; in burns, 797
St. Vitus's Dance (*Chorea*), 397
Stays and tight-lacing, 72, 653
Steaming the throat, 135, 233, 318
Steatoma (*Sebaceous Tumour*), 752
Sterno-cleido-mastoïdeus (*a prominent muscle of the neck, having one origin from the summit of the sternum, and another from the sternal portion of the clavicle, and inserted into the mastoid process of the temporal bone. Its uses are, to turn the head to one side, and to bend it forwards*), 256
Sterno-hyoïdeus (*στερνον*, the sternum, *and ὑοειδης*, the hyoid bone; *a muscle of the neck between the hyoid bone and the sternum, serving to depress the former*), 804
Sternum (*the breast-bone*), 546
Stertorous (*stertere*, to snore; *descriptive of the breathing in certain diseases*), 170
Stewing, 48
Sthenic (*σθενος*, strength; *preternatural vital action*), 423
Sticta, 489
Stiffness and aching from over-exertion, 817; *see also under* Arnica, 836
Stiff-neck (*Crick-in-the-neck*), 256
Stillingia, 285, 695, 696
Stimulants, alcoholic, 32, 196, 245, 269, 319, 357, 368, 370, 501, 505, 506, 535, 600, 614, 645, 655, 661, 684, 689, 697, 707, 715, 733; in snake bites, 760; *see also* Alcohol, 975
Stings of insects and plants, 758
Stomach, blood from, 588; disordered, *see* Dyspepsia; cancer of, 586; inflammation of, 585; overloading, 598; pain or spasm, 602; ulcer, 586; sinking at, 1033
Stomatitis (*inflammation of the mouth*), 561
Stone-in-the-bladder, 677; symptoms, 681
Stone-pock, 731
Strabismus (*στραβος*, twisted; *want of concordance of the optic axes, Squinting*), 466
Strain, 799
Stramonium (*thorn-apple*), 543, 942
Strangulated Hernia, 615
Strangury (*στραγγιω*, I squeeze, *and ουρον*, urine; *painful urination in drops*), 115, 353, 686
Strapping, 744
Striation (*stria*, a furrow; *the marking with small channels or grooves*), 449
Stricture of the Anus, *see under* Constipation, Æsculus, Plumbum, etc., of the urethra, 690, 694
Stricture (*stringere*, to draw tight; *the diminution or contraction of a tube or duct*), 690
Stricture of the Urethra, 698; pathology, 698; causes, 669; symptoms, 700; diagnosis, 700; treatment, 701; accessories, 701; *see* Calculus
Stridulous (*stridulus*, hissing, creaking), 519
Stroke, *see* Paralysis; *also* Sunstroke
Stroke of lightning, 792
Strophulus (*Tooth-rash*), 718
Struma (*Scrofula*), 294
Strychnia, 918, 983
Stuttering and stammering, 399
Stye on the eyelid, 471
Styptic (*στυφω*, I constringe; *an astringent for stopping hæmorrhage by promoting the contraction of the vessels, and the formation of the coagulum*), 490
Subcutaneous injections, 415
Subsultus tendinum (*twitching of the muscles*), 176
Subterraneous kitchens, 346
Sudamina) *an eruption of small vesicles like sweat*), 190
Suffocation, 789, 868; *see also* Hysteria, Angina pectoris, etc.
Suffocation from Hanging, 792
Sugar-of-lead, 963
Sugar-of-milk, 111, 564
Sulphur, 943
Sulphuric acid, 967
,, ether, 500
Sulphurous acid, 823; spray, 530, 564
Summer Catarrh, 517
,, Diarrhœa, 220, 631, 632
Sunlight, importance of, 63
Sunstroke, 366; symptoms, 366; causes, 366; treatment, 367; sequelæ, 368; accessories, 368; preventives, 368
Suppers, 33, 540, 593, 645
Suppression of Urine, 690
Suspended Animation, 789
Sweating (*see* Mercurius, China, etc.)
Sweets, 116, 627
Swelling of the glands, *see* Glands, Goître, etc.; White Swelling, 769
Swellings, dropsical, 352; of the extremities, *see* Œdema

Swing, cross-bar, 322, 334
Swooning, 501
Sycosis (*a rough fig-like excrescence on the flesh—Chin-whelk*), 734; tinea, 734
Symptomatic fever, 216
Symptoms and signs of disease, 82
Symptoms of stone in the bladder, 681
Syncope (*συγκοπτω*, I fall down; *fainting*), 150, 501, 783.
Synovia (*σὺν*, with, *and ωον*, egg; *a fluid resembling the white of egg secreted by the synovial membranes surrounding movable articulations which it lubricates*)
Synovial (*relating to synovia*), 769
Synovitis, 747
Syphilis, 281; diagnosis of infecting and non-infecting Chancre, 282; symptoms, 283; diagnosis, 282; treatment, 285; accessories, 287; hereditary, 726
Systolic (*σὺν*, with, *and στελλω*, I contract; *relating to the heart's contraction in propelling the blood*), 497

Tabacum (*tobacco*), 607
Tabes mesenterica (*wasting from tubercular disease of the mesenteric glands*), 308, 325; dorsalis, 374
Tænia solium (*tape-worm*), 393, 620
Talipes (*talipedo*, I am weak in the foot; *congenital distortion of the feet*), 688
Tamus Communis, 737
Tannin, 697
Tannic Acid, 492, 562
Tape-worm, 619
Tapioca, 110
Tar, oil of, 967
Tarantula, 377
Taraxacum (*Dandelion*), 946
Tarsal Ophthalmia, 472
Tartar Emetic, 831
Tea, 32; uses of, 49; when hurtful, 49; preparation of, 50; choice of, 51; price of, 51; varieties, 51; mixture, 51, 504, 643, 689
Teas, Ceylon, 52
Teeth, decayed, 569; extraction, 575; preservation, 675; stopping, 675
Teeth, false, plates and mercury, 478
Teething, 566; disorders, 567; symptoms, 567; causes, 567; treatment, 568; accessories, 569
Tellurium, 723
Temperature and clinical thermometer, 82; how to take, 82; in health and disease, 82
Temperature of baths, 77
Tendo Achillis (*the strong tendon inserted into the heel*), 256
Tenesmus (*τεινω*, I stretch; *painful straining*), 610
Terebinthina, 946
Testicles, Neuralgia of, 409; Inflammation of, 694
Tetanus (*Lock-jaw*), 380
Tetter, 721
,, Branny, 719
,, Dry, 719
Teucrium (*Cat-Thyme*), 947
Theatre, badly ventilated, 62
Thecal abscess, 745
Therapeutic (*θεραπευω*, I wait upon the sick; *relating to the treatment of disease*), 121
Thermometry, clinical, value of, 82, 313
Thin-soled boots, 72
Thorax (*θωραξ*, *breastplate; the osseo-cartilaginous framework of the chest, which partly bounds the abdomen*)
Thorns, stings, etc., to extract, 801
Thread worms, 618
Throat compress, 128; putrid sore; 227; deafness, 482; Sore, 579; Relaxed, 579; Ulcerated, 579, *see* Catarrh, Quinsy, Aphonia, etc.
Thrush (*Sore mouth*), symptoms, 562; causes, 563; treatment, 563; accessories, 564
Thuja Occidentalis, 493, 696, 752
Thyroid gland (*θυρα*, door, *or θυρεος*, shield; *the gland connected with the shield-like cartilage of the larynx*), 515
,, glands, enlargement of, 515
Tibia ("*a flute or pipe*," *the largest bone of the leg*), 329
Tic-douloureux (*Neuralgia*), 408
Tight-lacing, 72; a cause of Piles, 653
Tinctures, 98; how to drop, 101; for external use, 100
Tinea Sycosis, 734
Tinnitus Aurium (*tinnio*, I tinkle; *noises in the ears*), 476
Titanium, 586
Toast, 111; water, 116
Tobacco smoking, 81, 458, 504, 576, 592, 642; and Scrofula, 296
Tobacco, 983
Tomato, as food, 38
Tongue, in health and disease, 91; Inflammation of, 577; cracked or fissured, 578; Ulcer on, 578; pathological signs, 1037
Tongue-Tie, 578
Tonic (*rigid*) spasm, 381

Tonsils, inflamed, 582
Toothache, 569, 1037; treatment, 569; stopping teeth, 575; extraction of teeth, 575; preservation of teeth, 575
Tooth-rash, 718
Tormina (*torques*, I twist; *acute colicky pains in the bowels*), 610, 630
Torsion of an artery, 807
Toxæmic (*τοξικον*, poison, *and ἁιμα*, blood; *a poisoned state of blood*), 820
Toxicology (*an account of poisons*), *see* Part V., 955
Trachea (*τραχεια*, rough, *αρτηρια*, *artery; the windpipe*)
Tracheotomy (*τραχεια*, *and τομη*, an incision; *opening the trachea by a surgical operation*), 232, 523, 803
Training, mental and physical, 706
Transparent soap, 730
Traumatic (*τραυμα*, a wound; *caused by wounds*), 380
Traveller's case, 100
Treatment of the aged, 784
Trees and woods, influence of, 66
Trichina Spiralis, 619
Trigemini (*the fifth pair of nerves*), 940
Trismus (*Tetanus*), 380
Triturations, 98
Truss, 617
Tubercle (dim. of *tuber*, a swelling; *a sluggish tumour in the substance of organs, from the product of new matter, which at first resemble concrete albumen, but afterwards becomes soft and friable, and gradually acquires the character of pus*), 292, 295; *see* Scrofula, 294
Tubercular Meningitis, 303; diagnosis from Encephalitis, 356
Tuberculosis (*degeneration of tissue into tubercular matter*), 294
Tumours, malignant and non-malignant, 273
Tumour, sebaceous, 752
Tumefaction (*tumere*, to swell, *and facere*, to make; *swelling*), 291
Turkish bath, 766
Turpentine, 946
Tympanitic (*abdominal inflation, sounding on percussion like a drum*), 185, 907
Tympanum (*τυμπανον*, a drum; *the middle ear, an irregular-shaped cavity, between the meatus externus and the labyrinth, lined with a mucous membrane*), 479; membrane of, 479, 480
Typhoid (*diseases marked by great prostration, cerebral disturbance, and "low" symptoms*), 844
Typhoid-fever (*Enteric-fever*), 184
Typhus-fever, 174, diagnosis from Enteric, 176; preventives of, 183

Ulcer, 738; varieties, 738; causes, 739; treatment, 739; accessories, 740; eczematous, 724
Ulcer, of the stomach, 586; on the tongue, 578; varicose, 514; rodent, 288; of the genitals, 691; on the leg, 739; of the rectum, 647
Ulcerated Throat, 579
Ulceration of Conjunctiva, 877
Ulna (*the bone of the fore-arm which is prominent in the flexed elbow*), 329
Ulnar nerve (*a branch of the brachial plexus, distributed to the muscles, etc., of the fore-arm and hand*), 230
Umbilical (*pertaining to the navel*) Hernia, 618
Unhealthy employments, 78, 298
Uranium Nitricum, 339
Urates (*a compound of uric or lithic acid with the alkaline base*), 265
Uræmia (*urea in the blood*), 181, 672, 783
Urethra, stricture of, 698
Urethritis (*inflammation of the urethra*), 690
Urethrotomy, 701
Urinary system, diseases of, 669
Urination, difficult, 686
Urine, in health and disease, 94; Difficulty in passing, 686; Incontinence of, 687; Inability to pass, 690; Retention of, 690; sediment in, 677
Urtica Urens (*Stinging Nettle*), 714, 948
Urticaria (*urtica*, a nettle; *a disease marked by wheals, or a cutaneous eruption similar to that caused by nettle-stings*), 712; varieties, 713; symptoms, 713; causes, 713; treatment, 714; accessories, 714
Uva Ursi (*Bear Berry*), 948

Vaccination, 153; vaccinia, 153
Vaccinine, 150, 151
Vagina (*the canal leading to the womb*)
Valeriana Officinalis (*Valerian*), 948
Valerianate of Zinc, 403
Vals Water, 684
Vapour-bath, 123
Vapour, warm, 519; *see also* Inhalation
Varices, 512
Varicocele (*a varicose enlargement of the spermatic veins*), 512
Varicose ulcers, 514

Varicose veins, 512; symptoms, 512; causes, 513; consequences, 513; treatment, 513; accessories, 514, 725
Varicosis (*varicose condition*), 510
Variola (*Small-pox*), 145; diagnosis, 147; dangers, 148
Vascular (*vasculum*, a little vessel; *abounding in vessels, chiefly blood-vessels*)
Vegetables, 39; preserved, 39
Veins, Inflamed, 140; Varicose, 512
Venereal disease, 691
Venesection (*vena*, a vein, *and sectum*, cut; *opening a blood-vessel to extract blood*), 193
Venomous bites and wounds, 759
Venous blood, 806
Ventilation of sleeping-rooms, 59; sick-rooms, 151, 171, 183, 544, 613; of churches, schools, etc., 62; of houses, 65
Veratrum Album, 948
,, Viride, 949
Verdigris, 964
Vertex (*highest point, crown of the head*), 483
Vertebræ (*from verto*, I turn; *the series of twenty-four bones of the spinal column, so articulated as to permit the bending and rotation of the body*), 766; *see also* Intervertebral
Vertebræ in the aged, 780
Vertigo (*vertere*, to turn; *a state in which the person, or the objects he sees, seem to whirl round; giddiness*), 303, 602; *see also under* Gels. Bell., Nux, etc.
Vesicular (*having the nature of vesicles or minute bladders*), 246
Vesical (*relating to the bladder*), 678, 704
Viability (*a word denoting the capability of an infant to support independent existence*)
Vicarious (*substitutional*) hæmorrhage, 588
Viola Tricolor, 953
,, Odorata, 952
Virus (*Latin, poison. An unknown and inappreciable principle, the agent by which infectious diseases are transmitted. It differs from "venom" in being the result of a morbid process, whereas "venom" is a natural secretion*), 58
Vision, impairment of, 451
Vitriol, Blue, 964
,, Oil of, 967
Voice, loss of, 530
Vomica (*vomere*, to vomit; *an abscess of the lungs*), 295
Vomiting, 604; of blood, 587; of drunkards, 839
Voyage 324
Vulva (*the external female genitals*)

Walking-exercise, 66
Warm baths, 122, 233
Warts, 694, 752
Wasp-stings, 758
Wasting, *see* Emaciation, 171, 310
Wasting Palsy, 376
Watching fever-patients, 141, 183
Water, essentiality of, 55; impurities of, 55, 611, 623, 632; stagnant, 80; soft, 730, 734
Water, rain, 55
Water, value of in Dropsy, 336; in dyspepsia, 571; salt-water baths, 75
Water-bed, 139
Water-brash, 604
Water in the chest, 351; in the head, 303
Water, difficulty in passing, *see* Urine
Wax, accumulation of, 476; absence of, 476
Weakness, general, *see* Debility; muscular, 259
Wen (*an encysted tumour*), 752
Weeping leg, 725
Wet-compresses, 127
Wet-pack, 126, 163, 173, 196
Wetting the bed, 687
Wheat, the constituent parts of, 34
Whelk (*Maggot-pimple*), 732
White leg (*Phlegmasia alba dolens*), 511
White swelling of the joints, 769
Whites (*Leucorrhœa*), 301
Whitlow (*from two Saxon words meaning white and flame; Paronychia*), 744
Whooping-Cough, 234; pathology of, 235
Wildungen Water, 684, 685
Will, exercise of, 399
Wind (*flatulence*), 592
Winter and senility, 782
Winter-cough, 532
Work-rooms, 297
Worm-seed, 870
Worms, 618; injections, 624; varieties, 618; symptoms, 621; causes, 623; infectious, 624; treatment, 624; local measures, 626; diet, 627; accessories, 627; Guinea Worm, 629
Wound, 805; treatment, 805; of the face, 807; of the chest, 807; of the abdomen, 808; cuts, 808; poisoned and venomous, 760
Wrists, coldness of, 887

Xeroderma (ξηρος, dry, and δερμα, skin; *a parched state of the skin, from defective secretion of the sebiparous glands. In its several forms it constitutes Ichthyosis, or fish-skin disease*), 120, 1017

Yellow-fever, definition, 202; cause, 202; peculiarities, 203; symptoms, 203; treatment, 205; accessories, 207; preventives, 207

Yellows, the (*Jaundice*), 665
Youth and Age, 777

Zinc, Valerianate, 403
Zincum (*Zinc*), 953
Zizia, 394
Zona (*Herpes zoster*), 721
Zymotic diseases (ζυμη, *ferment; diseases in which a virus or poison acts upon and in the body like leaven*), 149, 233

WELLCOME LIBRARY INSTITUTE

UNWIN BROTHERS, THE GRESHAM PRESS, CHILWORTH AND LONDON

HOMŒOPATHIC STANDARD WORKS

ON

MEDICINE AND SURGERY

PUBLISHED BY

THE HOMŒOPATHIC PUBLISHING COMPANY,

WARWICK LANE, PATERNOSTER ROW, LONDON, E.C.

New Edition, in a handsome Volume. Price 21s. ; or half-morocco, 25s.

A TEXT BOOK

OF

MODERN MEDICINE & SURGERY,

ON HOMŒOPATHIC PRINCIPLES

By E. H. RUDDOCK, M.D., L.R.C.P., M.R.C.S., L.M. (Lond. & Edin.), &c.

For the use of the Professional Student, the Clergyman, the Missionary, the Colonist, Heads of Families, &c.

Ninth Edition. Sixty-Third Thousand, much enlarged and improved; best paper, Crown 8vo, wide margin, price 10s. 6d. cloth.

Half-bound, morocco, suitable for presentation, medicine chests, &c., 14s.

The

Homœopathic Vade Mecum

OF MODERN MEDICINE AND SURGERY.

With CLINICAL DIRECTORY, containing the results of personal experience of many physicians in addition to those who contributed to former editions. This portion of the work has been greatly extended. Also a chapter on POISONS, an APPENDIX OF FORMULÆ, TABLE OF DILUTIONS of the remedies prescribed, &c.

By E. H. RUDDOCK, M.D., F.R.C.P., M.R.C.S., L.M. (Lond. and Edin.), &c.

For the use of Junior Practitioners, Students, Clergymen, Missionaries, Heads of Families, &c.

CHEAPER EDITION, without Clinical Directory, &c., suitable for family use, may also be had, cloth, 5s.

Tenth Edition, revised and improved. Crown 8vo, neatly bound in cloth, price 3s. 6d.

THE LADIES' MANUAL

OF

Homœopathic Treatment.

In the Various Derangements Incident to her Sex.

By E. H. RUDDOCK, M.D., L.R.C.P., M.R.C.S., L.M. (Lond. and Edin.), &c.

Uniform with "The Ladies' Manual," Fifth Edition, revised and enlarged.
In cloth, price 3s. 6d

The Diseases of Infants and Children,

And their Homœopathic and General Treatment.

By E. H. RUDDOCK, M.D., &c.

Third Edition. Cloth, price 1s.

THE COMMON DISEASES OF CHILDREN.

A CAREFUL ABRIDGEMENT OF

"The Diseases of Infants and Children."

Twelfth Edition. Improved and Enlarged, with a CLINICAL DIRECTORY.
Toned paper, in neat cloth binding, 1s. 6d.
A CHEAP EDITION, without the Clinical Directory, limp cloth, 1s.

STEPPING-STONE TO HOMŒOPATHY AND HEALTH.

By E. H. RUDDOCK, M.D., M.R.C.S., &c., &c.

Second Edition, Revised. Fcap. 8vo, cloth, price 3s. 6d.

Essentials of Diet;

OR,

Hints on Food in Health and Disease.

By E. H. RUDDOCK, M.D., L.R.C.P., M.R.C.S.

Crown 8vo, handsomely bound in half calf, 840 pages, price 15s.

THE VETERINARY VADE MECUM.

A Manual on the Horse, Cow, Dog, and Sheep; their Diseases, Homœopathic Treatment, and General Management.

Edited by R. P. G. LORD, M.R.C.V.S.L.; also by J. RUSH and W. RUSH, Veterinary Surgeons.

Third Edition. 12mo, cloth, price 2s. 6d.

The Pocket Manual of omœopathic Veterinary Medicine.

Compiled by E. H. RUDDOCK, M.D., M.R.C.S. England.

Published Monthly, price 6d. (by post 7d.), or prepaid 6s. per annum, post free.

THE HOMŒOPATHIC WORLD.

A Journal for the Exposition of the Law of Similars and Elucidation of its Operation.

Including Medical News and Literature, Cases from Practice, Social and Sanitary Science, and Correspondence.

Edited by JOHN H. CLARKE, M.D., Ext. Mem. Roy. Med. Soc. Edin.